Techwin Lightning Solutions

Catalogue of Lightning Products

To make a safe world against lightning

Techwin Lightning Solutions

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Mission & Vision

To be the best lightning company in the world

Company Culture

Safety innovation united responsibility

Business Philosophy

Live on technology and innovation

Business Principles

Quality first customer supreme

Shenzhen Techwin Lightning Technologies Co., Ltd is a professional and high-tech enterprise engaged in R&D of surge protective device, which is a leading provider of lightning solutions in China.Our products are fully complied with the latest international and domestic standards and own over 10 technology patents. Our innovative products — SPD for AC/DC power, signal, RF, photovoltaic widely apply in telecom,power, railway, intelligent transportation, CCTV and solar project.

Our R&D department is run by some of the country's mostly leading experts in the field with rich experience in the manufacturing and design of lightning protection device. We are aimed at testing and solving problem in practical applicationTechwin manufactures a variety of OEM & ODM surge suppression solutions with high quality meeting customer requirements and work within customer existing equipment. On mission of "quality first, customer supreme" and relying on the leading technology of lightning protection, Techwin stands firmly in market with reliable products and innovative solutions, which facilitates the sustainable development of lightning industry.

To be the best lightning company of the world

Techwin strengths

Strong R &D capability: Advanced product and technology leading the industry.

Custom design capabilities: According to your unique specification and application needs.

Complete SPD solutions, covering industries such as telecommunication, power system, safety & security, PV solar energy, and others mission critical systems.

Rich Practical Experience: Industry proven with world wide customers and installations.

After-sale service: All Techwin SPD are guaranteed with 5 years warranty. During the guaranteed period, Techwin support maintenance or replacement for free.

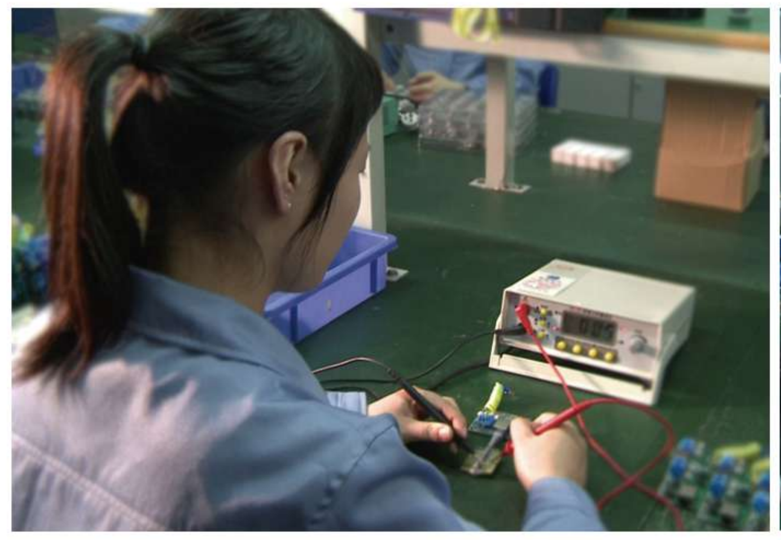
Strengths

Manufacturing Capability: 700,000 unit per year, OEM& ODM services are available.

Techwin’s products are manufactured according to international and domestic standards and under mostly strict quality standards. ISO9001 certified.

Test equipment

Testing equipment: high temperature tester, lightning unit tester, network analyzer, crystalloid tester, aging tester etc. surge generator with 1.2/50 & 8/20μs waveform, 10/350μs waveform.



Techwin milestones





- In 2015 Relocated to Large Industrial New Pingshan District Shenzhen

  Awarded the 15th China security enterprise brand awareness gold shop awards

  Participated the 15th China Public Security Expo (CPSE) successfully

- In 2014, Utility model patent for power surge protector

  Utility model patent for MDI 2 in 1 and SDI 2 in 1 lightning protector

  Cooperation with Jilin university

  Awarded as one of the most popular “Ten security companies”

- In 2013, utility patent of SDI lightning protector

  Utility patent for POE injector & POE splitter with lightning protection

  Awarded and recognized as "National high- tech Enterprises"

  Consultant of the Expert committee of China security network

- In 2012, National utility patent of gigabit POE protector

  Communication Lightning Solution Innovation Award in 2012

  Outstanding supplier of Smart Grid supporting equipment

- In 2011, CQC certificate for PV series products

  Global professional lightning protection solution provider

  Member of China Security Product Industry Association

  Awarded 2001-2011 Technology Innovation and User’s Satisfaction in China lightning protection summit meeting.

- In 2010, A member of Shenzhen Lightning Protection Association.

- In 2009, CE,ROSH Certification

  The enterprise of MIIT Qualification Recognition (MIIT the Ministry of Industry and Information Technology)

- In 2008, National Utility Patent of outdoor data sampling equipment lightning protector

  ISO9000:2008 quality system certification

- In 2007, Utility patent for POE protector

- In 2006, 5 years warranty, free technical support, product liability insurance

  Founded in 2006, with over 1000 square meters manufacturing area.

Honor & Certification

Enterprise Qualification


Utility Model Patent


Patent for Invention


Test Report of MIIT


MIIT Qualification Recognition


Region Registration Certification


CQC Solar Product Certificate


ISO Quality Management System Certification


CE Certification


ROSH Certification


Product Liability Insurance

Enterprise Honor


Future Star Award (Issued by CCID)


Member of Shenzhen Security Industry Association

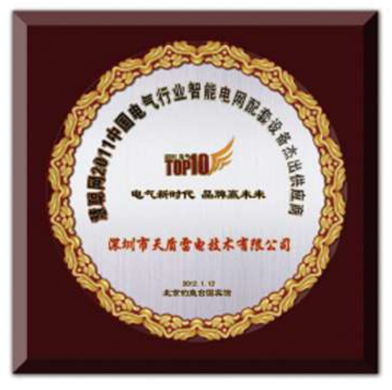

VIP Member of CCSA


Member of CSPIA


Lightning Protection Solution Innovation Award of China Telecom Industry

User's Satisfaction Award


Solution & Product Award for POE Surge Arrester


Outstanding Provider of IntelliGrid Associated Equipment

Application






○ Security Industry

CCTVS
Security monitoring system
Intelligent community
Building power distribution system
Anti–theft alarm system
Access control attendance system
Intercom system
Fire alarm system

○ Telecom Industry

Base station
Microwave station
WLAN system
Communication station power supply system

○ Power Industry

Power transmission system
Transformer substation device and system
Power distributor system

○ Intelligent Transportation Industry

Road monitor
Electronic police and alarm system
Parking management system
Information collection system

○ New Energy Industry

Petroleum industry
Chemical industry
Solar power systems
Wind power system
Geothermal, tidal power generation system

Naming Rule

Power Supply SPD Naming Rules:

B 100 L63 B 3 +N

Code	Description
B	B：Lightning protective box M：Lightning protective module
100	Maximum discharge current (kA)
L63	Connecting type (Parallel :no mark, in series: the L with rated current)
B	Maximum continuous operating voltage code
3	Quantity of MOV
+N	With NPE module

Max continuous operating voltage:

Max continuous operating voltage	420	385	320	275	160	110	85
Code	A	B	C	D	E	F	G

Single SPD Naming Rule:

D 05 J (F) 4 – 16 A

Code	Description
D	Signal lightning protective device code
05	Continuous operating voltage
J	Connector type
F	I/O form
4	Protection lines
16	Protection ports
A	Dipartite number for special products

Mode Code:

For connector type: show as the following form with a letter:

Connector type	N	BNC	SMA	TNC	UHF	F	RJ11	RJ45	CC4
Code	N	B	S	T	U	F	R	J	C

For I/O model: show as follow form with a letter:

I/O model	Female/Male	Female/Female
Code	M	F

Antenna Protector Naming Rule:

R 25 D 70 F A

Code	Description
R	Antenna protector code
25	Upper limiting frequency for transmission (*100MHz)
D	Connector type
70	Max continuous operating voltage
F	I/O form
A	Code symbol for special products

Model Code:

For connector type: show as follow form with a letter:

Connector type	DIN	N	TNC	SMA	BNC	F
Code	D	N	T	S	B	F

Standard Compliance:

IEC 61643–1 —— 2005 Surge Protective devices connected to low–voltage power distribution system.
EN60950 —— Safety of information technology equipment, including electrical business equipment.
IEC62305–1:2010 —— lightning protection
IEC61312–3:2000 —— Protection against Lightning Electromagnetic Impulse The third part: requirements for surge protector
IEC61643–21:2012 —— Surge protective devices connected to telecommunications and signaling networks–Performance requirements and testing methods
IEC 61024–1–2 —— The design, installation, maintenance and inspection of lightning protective device.
IEC60364 —— The selection and installation of over–voltage protection equipment
UL1449 —— Surge Protective Devices SPDs.

ROHS Certification

UL Certification

China National Accreditation Service for Conformity Assessment

International Laboratory Accreditation Cooperation– Mutual Recognition Arrangement

CE Certification

China Quality Certification Centre

CQC Golden Sun Certificate

International Electrical Commission

TUV Certification

Beijing Testing Cent of Surger Protective Device

Ministry of Industry and Information Technology

Name	Model		Main parameter				Response time	Protected mode		Dimension	Item No	Page
			Imax	In	Uc	Up		Module				
lightning protective box for AC power system(In Parallel)	B40B	B40B2	40kA	20kA	385V	1500V	25ns	2	L、N－PE	310*230*110mm	91005	P21
		B40B1+N	40kA	20kA	385V	1500V	25ns	2	L-N，N－PE	310*230*110mm	91006	P21
		B40B4	40kA	20kA	385V	1500V	25ns	4	L1、L2、L3、N－PE	310*230*110mm	91007	P21
		B40B3+N	40kA	20kA	385V	1500V	25ns	4	L1、L2、L3－N，N－PE	310*230*110mm	91008	P21
	B60B	B60B2	60kA	30kA	385V	1500V	25ns	2	L、N－PE	310*230*110mm	91009	P23
		B60B1+N	60kA	30kA	385V	1500V	25ns	2	L-N，N－PE	310*230*110mm	91011	P23
		B60B4	60kA	30kA	385V	1500V	25ns	4	L1、L2、L3、N－PE	310*230*110mm	91010	P23
		B60B3+N	60kA	30kA	385V	1500V	25ns	4	L1、L2、L3－N，N－PE	310*230*110mm	91012	P23
	B80B	B80B2	80kA	40kA	385V	1500V	25ns	2	L、N－PE	310*230*110mm	91013	P25
		B80B1+N	80kA	40kA	385V	1500V	25ns	2	L-N，N－PE	310*230*110mm	91015	P25
		B80B4	80kA	40kA	385V	1500V	25ns	4	L1、L2、L3、N－PE	400*300*120mm	91014	P25
		B80B3+N	80kA	40kA	385V	1500V	25ns	4	L1、L2、L3－N，N－PE	400*300*120mm	91016	P25
	B100B	B100B2	100kA	50kA	385V	1500V	25ns	2	L、N－PE	400*300*120mm	91017	P26
		B100B1+N	100kA	50kA	385V	1500V	25ns	2	L-N，N－PE	400*300*120mm	91020	P26
		B100B4	100kA	50kA	385V	1500V	25ns	4	L1、L2、L3，N－PE	400*300*120mm	91018	P26
		B100B3+N	100kA	50kA	385V	1500V	25ns	4	L1、L2、L3－N，N－PE	400*300*120mm	91019	P26
	B120B	B120B2	120kA	60kA	385V	1500V	25ns	2	L、N－PE	400*300*120mm	91048	P27
		B120B1+N	120kA	60kA	385V	1500V	25ns	2	L-N，N－PE	400*300*120mm	91054	P27
		B120B4	120kA	60kA	385V	1500V	25ns	4	L1、L2、L3、N－PE	400*300*120mm	91021	P27
		B120B3+N	120kA	60kA	385V	1500V	25ns	4	L1、L2、L3－N，N－PE	400*300*120mm	91022	P27
	B160B	B160B4	160kA	80kA	385V	1500V	25ns	4	L1、L2、L3、N－PE	400*300*120mm	91063	P28
		B160B3+N	160kA	80kA	385V	1500V	25ns	4	L1、L2、L3－N，N－PE	400*300*120mm	91064	P28
	B400	B400F3+N	400kA	200kA	160V	500V	25ns	8	L-N,N-PE	400*300*200mm	--	P31
		B400F4	400kA	200kA	160V	500V	25ns	8	L、N-PE	400*300*200mm	--	P31
		B400B3+N	400kA	200kA	385V	1500V	25ns	8	L-N,N-PE	400*300*200mm	--	P31
		B400B4	400kA	200kA	385V	1500V	25ns	8	L、N-PE	400*300*200mm	--	P31
	HM50	HM50F1N	50kA	30kA	160V	900V	25ns	-	L-N,N-PE	178*120*60mm	--	P33
		HM50F3N	50kA	30kA	160V	900V	25ns	-	L1、L2、L3-N,N-PE	185*118*78mm	--	P33
lightning protective box for AC power system(Series)	B60	B60L32B2	60kA	30kA	385V	1400V	25ns	2	L、N－PE	400*300*120mm	91065	P29
		B60L32B1+N	60kA	30kA	385V	1400V	25ns	2	L-N，N－PE	400*300*120mm	91066	P29
	B80	B80L32B2	80kA	40kA	385V	1400V	25ns	2	L、N－PE	450*330*140mm	91067	P29
		B80L32B1+N	80kA	40kA	385V	1400V	25ns	2	L-N，N－PE	450*330*140mm	91068	P29
		B80L63B4	80kA	40kA	385V	1400V	25ns	4	L1、L2、L3、N－PE	450*330*140mm	91069	P29
		B80L63B3+N	80kA	40kA	385V	1400V	25ns	4	L1、L2、L3－N，N－PE	450*330*140mm	91024	P29
	B100	B100L32B2	100kA	50kA	385V	1400V	25ns	2	L、N－PE	450*330*140mm	91070	P29
		B100L32B1+N	100kA	50kA	385V	1400V	25ns	2	L-N，N－PE	450*330*140mm	91071	P29
		B100L63B4	100kA	50kA	385V	1400V	25ns	4	L1、L2、L3、N－PE	450*330*140mm	91025	P29
		B100L63B3+N	100kA	50kA	385V	1400V	25ns	4	L1、L2、L3－N，N－PE	450*330*140mm	91023	P29
	B120	B120L32B2	120kA	60kA	385V	1400V	25ns	2	L、N－PE	450*330*140mm	91072	P29
		B120L32B1+N	120kA	60kA	385V	1400V	25ns	2	L-N，N－PE	450*330*140mm	91073	P29
		B120L63B4	120kA	60kA	385V	1400V	25ns	4	L1、L2、L3、N－PE	450*330*140mm	91074	P29
		B120L63B3+N	120kA	60kA	385V	1400V	25ns	4	L1、L2、L3－N，N－PE	450*330*140mm	91075	P29

Name	Model		Main parameter				Response time	Protected mode		Dimension	Item No	Page
			Imax	In	Uc	Up		Module				
	B160	B160L63B4	160kA	80kA	385V	1400V	25ns	4	L1、L2、L3、N－PE	450*330*140mm	91076	P29
		B160L63B3+N	160kA	80kA	385V	1400V	25ns	4	L1、L2、L3－N，N-PE	450*330*140mm	91077	P29
lightning protective box for DC power system		B40-220	40kA	20kA	320V	1300V	25ns	2	+、－－PE	310*230*110mm	91078	P53
		B40-48	40kA	20kA	85V	300V	25ns	2	+、－－PE	310*230*110mm	91079	P53
SPD for power system AC Module	M40A	M40A	40kA	20kA	420V	2000V	25ns	1	L-PE	90*18*65mm	92801	P35
		M40A2	40kA	20kA	420V	2000V	25ns	2	L、N-PE	90*36*65mm	92802	P35
		M40A1+N	40kA	20kA	420V	2000V	25ns	2	L-N，N－PE	90*36*65mm	92803	P35
		M40A4	40kA	20kA	420V	2000V	25ns	4	L1、L2、L3，N-PE	90*72*65mm	92804	P35
		M40A3+N	40kA	20kA	420V	2000V	25ns	4	L1、L2、L3－N，N－PE	90*72*65mm	92805	P35
	M40B	M40B	40kA	20kA	385V	1700V	25ns	1	L-PE	90*18*65mm	92006/92039	P35
		M40B2	40kA	20kA	385V	1700V	25ns	2	L、N-PE	90*36*65mm	92007/92040	P35
		M40B1+N	40kA	20kA	385V	1700V	25ns	2	L-N，N－PE	90*36*65mm	92008/92041	P35
		M40B4	40kA	20kA	385V	1700V	25ns	4	L1、L2、L3、N-PE	90*72*65mm	92010/92043	P35
		M40B3+N	40kA	20kA	385V	1700V	25ns	4	L1、L2、L3－N，N－PE	90*72*65mm	92009/92042	P35
	M40C	M40C	40kA	20kA	320V	1300V	25ns	1	L-PE	90*18*65mm	92806	P35
		M40C2	40kA	20kA	320V	1300V	25ns	2	L、N-PE	90*36*65mm	92807	P35
		M40C1+N	40kA	20kA	320V	1300V	25ns	2	L-N，N－PE	90*36*65mm	92808	P35
		M40C4	40kA	20kA	320V	1300V	25ns	4	L1、L2、L3、N-PE	90*72*65mm	92809	P35
		M40C3+N	40kA	20kA	320V	1300V	25ns	4	L1、L2、L3－N，N－PE	90*72*65mm	92810	P35
	M40D	M40D	40kA	20kA	275V	1100V	25ns	1	L-PE	90*18*65mm	92811	P35
		M40D2	40kA	20kA	275V	1100V	25ns	2	L、N-PE	90*36*65mm	92812	P35
		M40D1+N	40kA	20kA	275V	1100V	25ns	2	L-N，N－PE	90*36*65mm	92813	P35
		M40D4	40kA	20kA	275V	1100V	25ns	4	L1、L2、L3、N-PE	90*72*65mm	92814	P35
		M40D3+N	40kA	20kA	275V	1100V	25ns	4	L1、L2、L3－N，N－PE	90*72*65mm	92815	P35
	M60A	M60A	60kA	30kA	420V	2000V	25ns	1	L-PE	90*18*65mm	92816	P37
		M60A2	60kA	30kA	420V	2000V	25ns	2	L、N-PE	90*36*65mm	92817	P37
		M60A1+N	60kA	30kA	420V	2000V	25ns	2	L-N，N－PE	90*36*65mm	92818	P37
		M60A4	60kA	30kA	420V	2000V	25ns	4	L1、L2、L3，N-PE	90*72*65mm	92819	P37
		M60A3+N	60kA	30kA	420V	2000V	25ns	4	L1、L2、L3－N，N－PE	90*72*65mm	92820	P37
	M60B	M60B	60kA	30kA	385V	2000V	25ns	1	L-PE	90*18*65mm	92011/92044	P37
		M60B2	60kA	30kA	385V	2000V	25ns	2	L、N-PE	90*36*65mm	92012/92045	P37
		M60B1+N	60kA	30kA	385V	2000V	25ns	2	L-N，N－PE	90*36*65mm	92015/92048	P37
		M60B4	60kA	30kA	385V	2000V	25ns	4	L1、L2、L3、N-PE	90*72*65mm	92013/92046	P37
		M60B3+N	60kA	30kA	385V	2000V	25ns	4	L1、L2、L3－N，N－PE	90*72*65mm	92014/92047	P37
	M60C	M60C	60kA	30kA	320V	1300V	25ns	1	L-PE	90*18*65mm	92821	P37
		M60C2	60kA	30kA	320V	1300V	25ns	2	L、N-PE	90*36*65mm	92822	P37
		M60C1+N	60kA	30kA	320V	1300V	25ns	2	L-N，N－PE	90*36*65mm	92823	P37
		M60C4	60kA	30kA	320V	1300V	25ns	4	L1、L2、L3、N-PE	90*72*65mm	92824	P37
		M60C3+N	60kA	30kA	320V	1300V	25ns	4	L1、L2、L3－N，N－PE	90*72*65mm	92825	P37

Remark:Imax : Maximum discharge current (Impact of current):In : Nominal discharge current ;
Uc :Max continuous operating voltage ;Up :Protection level (20kA,8/20μs)

Standard models are shown, Customized solutions available.

Name	Model		Main parameter Imax	In	Uc	Up	Response time	Module	Protected mode	Dimension	Item No	Page
SPD for power supply system AC Module	M60D	M60D	60kA	30kA	275V	1100V	25ns	1	L–PE	90*18*65mm	92826	P37
		M60D2	60kA	30kA	275V	1100V	25ns	2	L、N–PE	90*36*65mm	92827	P37
		M60D1+N	60kA	30kA	275V	1100V	25ns	2	L–N, N–PE	90*36*65mm	92828	P37
		M60D4	60kA	30kA	275V	1100V	25ns	4	L1、L2、L3、N–PE	90*72*65mm	92829	P37
		M60D3+N	60kA	30kA	275V	1100V	25ns	4	L1、L2、L3–N, N–PE	90*72*65mm	92830	P37
	M80A	M80A	80kA	40kA	420V	2000V	25ns	1	L–PE	90*36*65mm	92831	P39
		M80A2	80kA	40kA	420V	2000V	25ns	2	L、N–PE	90*72*65mm	92832	P39
		M80A1+N	80kA	40kA	420V	2000V	25ns	2	L–N, N–PE	90*72*65mm	92833	P39
		M80A4	80kA	40kA	420V	2000V	25ns	4	L1、L2、L3、N–PE	90*144*65mm	92834	P39
		M80A3+N	80kA	40kA	420V	2000V	25ns	4	L1、L2、L3–N, N–PE	90*144*65mm	92835	P39
	M80B	M80B	80kA	40kA	385V	1500V	25ns	1	L–PE	90*36*65mm	92016/92049	P39
		M80B2	80kA	40kA	385V	1500V	25ns	2	L、N–PE	90*72*65mm	92017/92050	P39
		M80B1+N	80kA	40kA	385V	1500V	25ns	2	L–N, N–PE	90*72*65mm	92019/92052	P39
		M80B4	80kA	40kA	385V	1500V	25ns	4	L1、L2、L3、N–PE	90*144*65mm	92020/92053	P39
		M80B3+N	80kA	40kA	385V	1500V	25ns	4	L1、L2、L3–N, N–PE	90*144*65mm	92018/92051	P39
	M80C	M80C	80kA	40kA	320V	1300V	25ns	1	L–PE	90*36*65mm	92836	P39
		M80C2	80kA	40kA	320V	1300V	25ns	2	L、N–PE	90*72*65mm	92837	P39
		M80C1+N	80kA	40kA	320V	1300V	25ns	2	L–N, N–PE	90*72*65mm	92838	P39
		M80C4	80kA	40kA	320V	1300V	25ns	4	L1、L2、L3、N–PE	90*144*65mm	92839	P39
		M80C3+N	80kA	40kA	320V	1300V	25ns	4	L1、L2、L3–N, N–PE	90*144*65mm	92840	P39
	M80D	M80D	80kA	40kA	275V	1100V	25ns	1	L–PE	90*36*65mm	92841	P39
		M80D2	80kA	40kA	275V	1100V	25ns	2	L、N–PE	90*72*65mm	92842	P39
		M80D1+N	80kA	40kA	275V	1100V	25ns	2	L–N, N–PE	90*72*65mm	92843	P39
		M80D4	80kA	40kA	275V	1100V	25ns	4	L1、L2、L3、N–PE	90*144*65mm	92844	P39
		M80D3+N	80kA	40kA	275V	1100V	25ns	4	L1、L2、L3–N, N–PE	90*144*65mm	92845	P39
	M100A	M100A	100kA	50kA	420V	2000V	25ns	1	L–PE	90*36*65mm	92846	P41
		M100A2	100kA	50kA	420V	2000V	25ns	2	L、N–PE	90*72*65mm	92847	P41
		M100A1+N	100kA	50kA	420V	2000V	25ns	2	L–N, N–PE	90*72*65mm	92848	P41
		M100A4	100kA	50kA	420V	2000V	25ns	4	L1、L2、L3、N–PE	90*144*65mm	92849	P41
		M100A3+N	100kA	50kA	420V	2000V	25ns	4	L1、L2、L3–N, N–PE	90*144*65mm	92850	P41
	M100B	M100B	100kA	50kA	385V	1500V	25ns	1	L–PE	90*36*65mm	92021/92054	P41
		M100B2	100kA	50kA	385V	1500V	25ns	2	L、N–PE	90*72*65mm	92024/92057	P41
		M100B1+N	100kA	50kA	385V	1500V	25ns	2	L–N, N–PE	90*72*65mm	92025/92058	P41
		M100B4	100kA	50kA	385V	1500V	25ns	4	L1、L2、L3、N–PE	90*144*65mm	92022/92055	P41
		M100B3+N	100kA	50kA	385V	1500V	25ns	4	L1、L2、L3–N, N–PE	90*144*65mm	92023/92056	P41
	M100C	M100C	100kA	50kA	320V	1300V	25ns	1	L–PE	90*36*65mm	92851	P41
		M100C2	100kA	50kA	320V	1300V	25ns	2	L、N–PE	90*72*65mm	92852	P41
		M100C1+N	100kA	50kA	320V	1300V	25ns	2	L–N, N–PE	90*72*65mm	92853	P41
		M100C4	100kA	50kA	320V	1300V	25ns	4	L1、L2、L3、N–PE	90*144*65mm	92854	P41
		M100C3+N	100kA	50kA	320V	1300V	25ns	4	L1、L2、L3–N, N–PE	90*144*65mm	92855	P41
	M100D	M100D	100kA	50kA	275V	1100V	25ns	1	L–PE	90*36*65mm	92856	P41
		M100D2	100kA	50kA	275V	1100V	25ns	2	L、N–PE	90*72*65mm	92857	P41
SPD for power supply system AC Module	M100D	M100D1+N	100kA	50kA	275V	1100V	25ns	2	L–N, N–PE	90*72*65mm	92858	P41
		M100D4	100kA	50kA	275V	1100V	25ns	4	L1、L2、L3、N–PE	90*144*65mm	92859	P41
		M100D3+N	100kA	50kA	275V	1100V	25ns	4	L1、L2、L3–N, N–PE	90*144*65mm	92860	P41
	M120A	M120A	120kA	60kA	420V	2000V	25ns	1	L–PE	90*36*65mm	92861	P43
		M120A2	120kA	60kA	420V	2000V	25ns	2	L、N–PE	90*72*65mm	92862	P43
		M120A1+N	120kA	60kA	420V	2000V	25ns	2	L–N, N–PE	90*72*65mm	92863	P43
		M120A4	120kA	60kA	420V	2000V	25ns	4	L1、L2、L3、N–PE	90*144*65mm	92864	P43
		M120A3+N	120kA	60kA	420V	2000V	25ns	4	L1、L2、L3–N, N–PE	90*144*65mm	92865	P43
	M120B	M120B	120kA	60kA	385V	1500V	25ns	1	L–PE	90*36*65mm	92026/92059	P43
		M120B2	120kA	60kA	385V	1500V	25ns	2	L、N–PE	90*72*65mm	92027/92060	P43
		M120B1+N	120kA	60kA	385V	1500V	25ns	2	L–N, N–PE	90*72*65mm	92029	P43
		M120B4	120kA	60kA	385V	1500V	25ns	4	L1、L2、L3、N–PE	90*144*65mm	92031/92064	P43
		M120B3+N	120kA	60kA	385V	1500V	25ns	4	L1、L2、L3–N, N–PE	90*144*65mm	92030/92063	P43
	M100	M100B+C/1+N	100kA	50kA	385V	1100V	25ns	2	L1–N, N–PE	90*72*65mm	921721	P45
		M100B+C/3+N	100kA	50kA	385V	1100V	25ns	4	L1、L2、L3–N, N–PE	90*144*65mm	921731	P45
	MA25	MA25B2	100kA	50kA	385V	1100V	100ns	–	L,N–PE	90*36*65mm	—	P47
		MA25B3	100kA	50kA	385V	1100V	100ns	–	L1、L2、L3–PE	90*54*65mm	—	P47
		MA25B4	100kA	50kA	385V	1100V	100ns	–	L1、L2、L3、N–PE	90*72*65mm	—	P47
		MA25B1+N	100kA	50kA	385V	1100V	100ns	–	L–N, N–PE	90*36*65mm	—	P47
		MA25B3+N	100kA	50kA	385V	1100V	100ns	–	L1、L2、L3–N, N–PE	90*72*65mm	—	P47
SPD for power supply system DC Module	M40	M40–1000	40kA	20kA	1200V	3000V	25ns	3	+、– – PE	90*54*65mm	92095/92079	P55
		M40–800	40kA	20kA	1000V	2500V	25ns	3	+、– – PE	90*54*65mm	92095/92079	P55
		M40–600	40kA	20kA	800V	2000V	25ns	3	+、– – PE	90*54*65mm	92087/92071	P55
		M40–500	40kA	20kA	650V	1500V	25ns	3	+、– – PE	90*54*65mm	92085/92069	P55
		M40–220	40kA	20kA	275V	1100V	25ns	2	+、– – PE	90*36*65mm	92083/92067	P55
		M40–48	40kA	20kA	85V	300V	25ns	2	+、– – PE	90*36*65mm	92084/92068	P55
	M20	M20–48	20kA	10kA	85V	250V	25ns	2	+、– – PE	90*36*65mm	92098/92082	P55
		M20–24	20kA	10kA	30V	150V	25ns	2	+、– – PE	90*36*65mm	92093	P55
	M10	M10–220	10kA	5kA	275V	≤800V	25ns	2	+、– – PE	90*36*65mm	92097/92080	P55
		M10–48	10kA	5kA	85V	≤200V	25ns	2	+、– – PE	90*36*65mm	92144	P55
		M10–24	10kA	5kA	30V	≤100V	25ns	2	+、– – PE	90*36*65mm	92094/92078	P55
		M10–12	10kA	5kA	15V	≤40V	25ns	2	+、– – PE	90*36*65mm	92092/92076	P55
PDU with Lightning Protection	PDU	MC10–220–3	10kA	5kA	275V	≤900V	25ns	—	L、N–PE	255*55*35mm	92099	P49
		MC10–220–4	10kA	5kA	275V	≤900V	25ns	—	L、N–PE	310*55*33mm	92100	P49
		MC10–220–5	10kA	5kA	275V	≤900V	25ns	—	L、N–PE	315*55*33mm	92101	P49
		MC10–220–6	10kA	5kA	275V	≤900V	25ns	—	L、N–PE	410*52*30mm	92102	P49
	PDU	PDU10–220–6	10kA	5kA	275V	≤800V	25ns	—	L、N–PE	485*62*45mm	92105	P51
		PDU16–220–8	10kA	5kA	275V	≤800V	25ns	—	L、N–PE	485*62*45mm	92106/92156	P51
		PDU32–220–16	10kA	5kA	275V	≤800V	25ns	—	L、N–PE	—	92178	P51

Remark:Imax : Maximum discharge current (Impact of current):In : Nominal discharge current ;

Uc :Max continuous operating voltage ;Up :Protection level (20kA,8/20μs)

Standard models are shown, Customized solutions available.

Configurator Catalog

Name		Model	Imax	In	Uc	Up	Insertion loss	Interface form	Protection lines	Protection ports	Dimension	Item No	Page
Audio protector		D180R2	5kA	3kA	180V	250V	≤0.5dB	RJ11	2/3,4/5	1Port	85*25*25mm	93001	P57
		D180R4	5kA	3kA	180V	250V	≤0.5dB	RJ11	2,3,4,5	1Port	85*25*25mm	93002	P57
		D180Y2-10	5kA	3kA	180V	250V	≤0.5dB	Inserting type	1,2	10Ports	96*43*70mm	93006	P57
		D180Y2-A	5kA	3kA	180V	250V	≤0.5dB	Clamped type	1,2	1Port	90*14*65mm	93003	P57
		D180R2-16	5kA	3kA	180V	250V	≤0.5dB	RJ11	2/3,4/5	16Ports	480*86*42mm	—	P57
		D180R2-24	5kA	3kA	180V	250V	≤0.5dB	RJ11	2/3,4/5	24Ports	480*86*42mm	93007	P57
Data line protector	Data line protector	D05J4 (100Mbps)	5kA	3kA	5V	20V	≤0.5dB	RJ45	1/2,3/6	1Port	83*25*25mm	93101	P59
		D05J4-4 (100Mbps)	5kA	3kA	5V	20V	≤0.5dB	RJ45	1/2,3/6	4Ports	83*74*29mm	93118	P59
		D05J4-8 (100Mbps)	5kA	3kA	5V	20V	≤0.5dB	RJ45	1/2,3/6	8Ports	190*85*48mm	93104	P59
		D05J4-16 (100Mbps)	5kA	3kA	5V	20V	≤0.5dB	RJ45	1/2,3/6	16Ports	482*86*44mm	93120	P59
		D05J4-24 (100Mbps)	5kA	3kA	5V	20V	≤0.5dB	RJ45	1/2,3/6	24Ports	482*86*44mm	93105	P59
		D05J8 (100Mbps)	5kA	3kA	5V	20V	≤0.5dB	RJ45	1/2,3/6,4/5,7/8	1Port	83*25*25mm	93102	P59
		D05J8-4 (100Mbps)	5kA	3kA	5V	20V	≤0.5dB	RJ45	1/2,3/6,4/5,7/8	4Ports	83*74*29mm	93119	P59
		D05J8-8 (100Mbps)	5kA	3kA	5V	20V	≤0.5dB	RJ45	1/2,3/6,4/5,7/8	8Ports	190*85*48mm	93108	P59
		D05J8-16 (100Mbps)	5kA	3kA	5V	20V	≤0.5dB	RJ45	1/2,3/6,4/5,7/8	16Ports	482*86*44mm	93115	P59
		D05J8-24 (100Mbps)	5kA	3kA	5V	20V	≤0.5dB	RJ45	1/2,3/6,4/5,7/8	24Ports	482*86*44mm	93107	P59
		D05J8H (1000Mbps)	5kA	3kA	5V	20V	BER≤10^{-12}	RJ45	1/2,3/6,4/5,7/8	1Port	83*25*25mm	93103	P59
		D05J8H-4 (1000Mbps)	5kA	3kA	5V	20V	BER≤10^{-12}	RJ45	1/2,3/6,4/5,7/8	4Ports	83*74*29mm	93119	P59
		D05J8H-8 (1000Mbps)	5kA	3kA	5V	20V	BER≤10^{-12}	RJ45	1/2,3/6,4/5,7/8	8Ports	190*85*48mm	93108	P59
		D05J8H-16 (1000Mbps)	5kA	3kA	5V	20V	BER≤10^{-12}	RJ45	1/2,3/6,4/5,7/8	16Ports	482*86*44mm	93115	P59
		D05J8H-24 (1000Mbps)	5kA	3kA	5V	20V	BER≤10^{-12}	RJ45	1/2,3/6,4/5,7/8	24Ports	482*86*44mm	93107	P59
	Ethernet power supply arrester	POE6-24 (GigE)	5kA	3kA	30V	100V	BER≤10^{-12}	RJ45	1/2,3/6,4/5,7/8	1Port	105*28*45mm	93135	P61
		POE6-48 (GigE)	5kA	3kA	57V	150V	BER≤10^{-12}	RJ45	1/2,3/6,4/5,7/8	1Port	105*28*45mm	93131	P61
		POE6-48-OD (GigE)	5kA	3kA	57V	150V	BER≤10^{-12}	RJ45	1/2,3/6,4/5,7/8	1Port	160*165*77mm	93138	P61
		POE6-48-F (GigE)	5kA	3kA	57V	150V	BER≤10^{-12}	RJ45	1/2,3/6,4/5,7/8	1Port	——	——	P63
		POE6-48-H (GigE)	5kA	3kA	57V	150V	BER≤10^{-12}	RJ45	1/2,3/6,4/5,7/8	1Port	——	——	P63
	2 in 1lightning arrester	M10-12/D05J4	5kA	3kA	5V	20V	≤0.5dB	crimping &RJ45	1/2,3/6	2Ports	112*60*26mm	93112	P73
		M10-24/D05J4	5kA	3kA	5V	20V	≤0.5dB	crimping &RJ45	1/2,3/6	2Ports	112*60*25mm	93111	P73
		M10-220/D05J4	5kA	3kA	5V	20V	≤0.5dB	crimping &RJ45	1/2,3/6	2Ports	112*60*27mm	93110	P73
		MDI-2	5kA	3kA	5V	20V	BER≤10^{-12}	crimping &RJ45	1/2,3/6,4/5,7/8	2Ports	88*68*40mm	——	P85
		MDI-3	5kA	3kA	5V	20V	BER≤10^{-12}	crimping &RJ45	1/2,3/6,4/5,7/8	3Ports	88*68*38mm	——	P85
Video & Signal protector		D12BM	5kA	3kA	12V	40V	≤0.5dB	BNC	——	1Port	83*25*25mm	93501	P65
		D12BM-4	5kA	3kA	12V	40V	≤0.5dB	BNC	——	4Ports	110*74*29mm	93513	P65
		D12BM-8	5kA	3kA	12V	40V	≤0.5dB	BNC	——	8Ports	170*128*43mm	93508	P65
		D12BM-16	5kA	3kA	12V	40V	≤0.5dB	BNC	——	16Ports	482*95*45mm	93510	P65
		D24BM	5kA	3kA	24V	100V	≤0.5dB	BNC	——	1Port	83*25*25mm	93504	P65
		SDI-1	5kA	3kA	12V	40V	BER≤10^{-12}	BNC	——	1Port	90*25*25mm	—	P81
		SDI-2	5kA	3kA	12V	40V	BER≤10^{-12}	crimping &BNC	——	2Ports	118*90*45mm	—	P81
		SDI-3	5kA	3kA	12V	40V	BER≤10^{-12}	crimping &BNC	——	3Ports	118*90*45mm	—	P81

Remark:Imax : Maximum discharge current (Impact of current):In : Nominal discharge current ;

Uc :Max continuous operating voltage ;Up :Protection level (20kA,8/20μs)

Standard models are shown, Customized solutions available.

Name		Model	Imax	In	Uc	Up	Insertion loss	Interface form	Number of protective port	Dimension	Item No	Page
Control line protector		D05Y2	5kA	3kA	5V	20V	≤0.5dB	Compression plug	2Lines	85*25*25mm	93308	P67
		D05Y2-A	5kA	3kA	5V	20V	≤0.5dB	Compression plug	2Lines	85*25*25mm	93312	P67
		D05Y3	5kA	3kA	5V	20V	≤0.5dB	Compression plug	3Lines	85*25*25mm	93311	P67
		D05Y4	5kA	3kA	5V	20V	≤0.5dB	Compression plug	4Lines	85*25*25mm	93317	P67
		D12Y2	5kA	3kA	12V	40V	≤0.5dB	Compression plug	2Lines	85*25*25mm	93301	P67
		D12Y2-A	5kA	3kA	12V	40V	≤0.5dB	Compression plug	2Lines	90*14*65mm	93319	P67
		D12Y3	5kA	3kA	12V	40V	≤0.5dB	Compression plug	3Lines	85*25*25mm	93316	P67
		D12Y4	5kA	3kA	12V	40V	≤0.5dB	Compression plug	4Lines	85*25*25mm	93303	P67
		D24Y2	5kA	3kA	24V	100V	≤0.5dB	Compression plug	2Lines	85*25*25mm	93302	P67
		D24Y2-A	5kA	3kA	24V	100V	≤0.5dB	Compression plug	2Lines	90*14*65mm	93309	P67
		D24Y3	5kA	3kA	24V	100V	≤0.5dB	Compression plug	3Lines	85*25*25mm	—	P67
		D24Y4	5kA	3kA	24V	100V	≤0.5dB	Compression plug	4Lines	85*25*25mm	93304	P67
		D36Y2	5kA	3kA	36V	120V	≤0.5dB	Compression plug	2Lines	85*25*25mm	93314	P67
		D36Y2-A	5kA	3kA	36V	120V	≤0.5dB	Compression plug	2Lines	90*14*65mm	93324	P67
		D36Y3	5kA	3kA	36V	120V	≤0.5dB	Compression plug	3Lines	85*25*25mm	—	P67
		D36Y4	5kA	3kA	36V	120V	≤0.5dB	Compression plug	4Lines	85*25*25mm	—	P67
Anti-explosion protector		D48Y2-T-1/2NPT	10kA	5kA	48V	500V	≤0.5dB	Connection	2Lines	75*30*27mm	—	P69
		D48Y3-T-1/2NPT	10kA	5kA	48V	500V	≤0.5dB	Connection	3Lines	75*30*27mm	—	P69
		D48Y4-T-1/2NPT	10kA	5kA	48V	500V	≤0.5dB	Connection	4Lines	75*30*27mm	—	P69
serial port signal protector		D24DB9-9	5kA	3kA	24V	100V	≤0.5dB	DB Connector	9Needles	102*55*25mm	93315	P71
		D24DB15-15	5kA	3kA	24V	100V	≤0.5dB	DB Connector	15Needles	102*55*25mm	93313	P71
Monitor proctor	3 in 1	M10-12/D12BM/D12Y2	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	3Ports	122*80*30mm	95001	P79
		M10-12/D12BF/D12Y2	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	3Ports	122*80*30mm	95002	P79
		M10-24/D12BM/D12Y2	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	3Ports	122*80*30mm	95004	P79
		M10-24/D12BF/D12Y2	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	3Ports	122*80*30mm	95005	P79
		M10-220/D12BM/D12Y2	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	3Ports	122*80*30mm	95007	P79
		M10-220/D12BF/D12Y2	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	3Ports	122*80*30mm	95008	P79
		M10-12/D05J4/D12Y2	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	3Ports	118*82*45mm	——	P83
		M10-24/D05J4/D12Y2	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	3Ports	118*82*45mm	——	P83
		M10-220/D05J4/D12Y2	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	3Ports	118*82*45mm	——	P83
		M10-220/D05J4/D12Y6	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	5Ports	137*82*35mm	——	P83
	2 in 1	M10-12/D12BM	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	2Ports	112*60*25mm	95010	P75
		M10-12/D12BF	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	2Ports	112*60*25mm	95012	P75
		M10-24/D12BM	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	2Ports	112*60*25mm	95016	P75
		M10-24/D12BF	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	2Ports	112*60*25mm	95019	P75
		M10-220/D12BM	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	2Ports	112*60*25mm	95018	P75
		M10-220/D12BF	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	2Ports	112*60*25mm	95019	P75
		M10-12/D12Y2	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	2Ports	112*60*25mm	95013	P77
		M10-24/D12Y2	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	2Ports	112*60*25mm	95017	P77
		M10-220/D12Y2	5kA	3kA	12V	40V	≤0.5dB	compression joint&BNC	2Ports	112*60*25mm	95021	P77
		M10-12/D18Y4	5kA	3kA	18V	60V	≤0.5dB	compression joint&BNC	3Ports	112*60*25mm	95022	P77

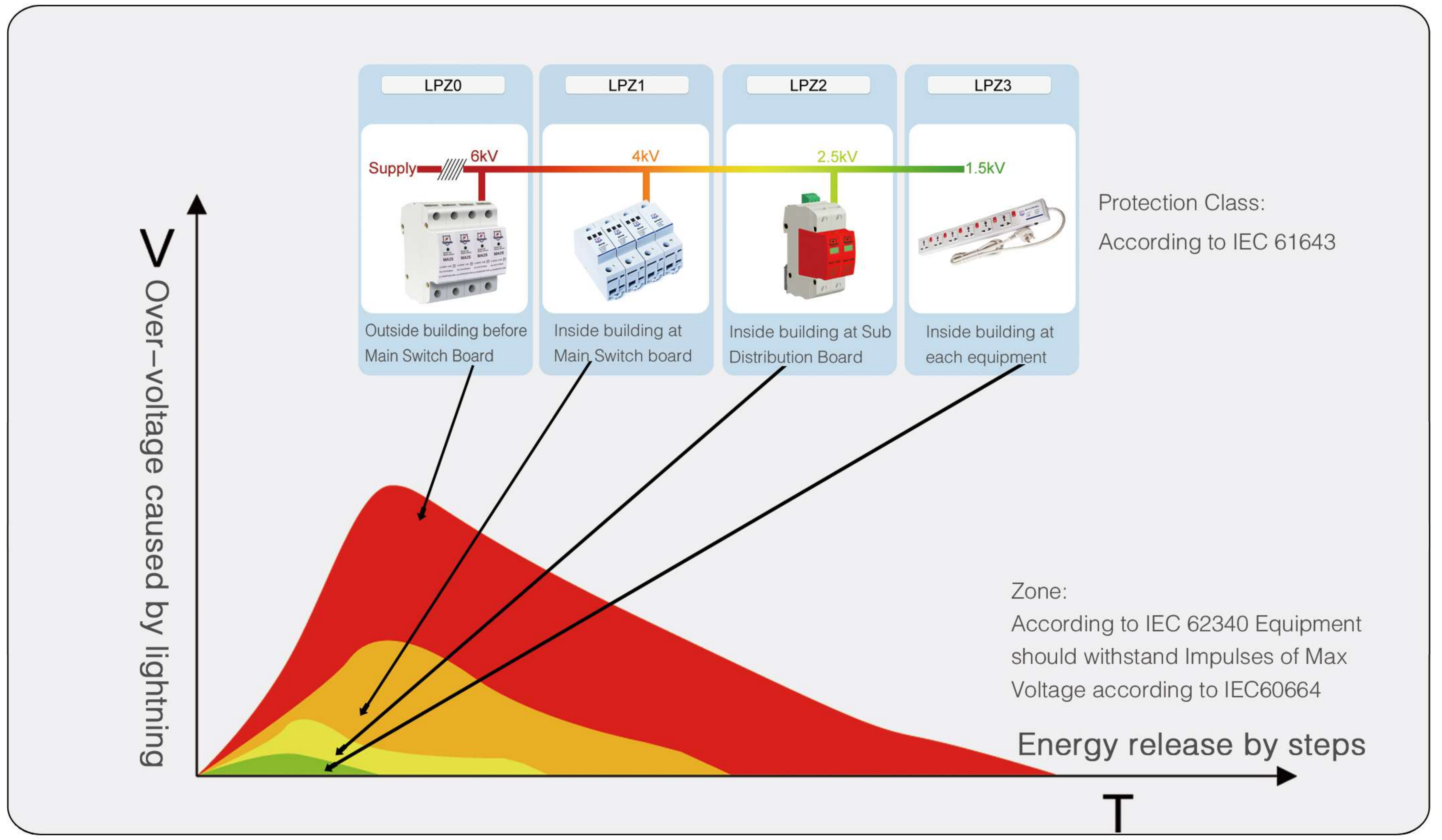
Name	Model	Main parameter Imax	Uc	Up	Working frequency	VAWR	Insertion loss	Interface form	Dimension	Item No	Page
Quarter wave RF protector	R27NF–1/4	40kA	—	200V	0.8–2.7GHz	1.15	0.1dB	N–J/K	—	94001	P91
	R27DF–1/4	60kA	—	200V	0.8–2.7GHz	1.15	0.1dB	DIN–J/K	—	94002	P91
	R60NF–1/4	40kA	—	200V	2.3–6GHz	1.15	0.1dB	N–K/J	—	94023	P91
	R05NF–1/4	30kA	—	200V	0.4–0.5GHz	1.15	0.1dB	N–J/K	—	94024	P91
Gas–tube Arrester	R30N70F	20kA	70V	200V	0–3GHz	1.2	0.2dB	N–K/J	—	94003/94009	P87
	R21F70F	20kA	70V	200V	0–2.1GHz	1.2	0.2dB	F–K/J	—	94005	P87
	R05U70F	20kA	70V	200V	0–0.5GHZ	1.2	0.2dB	U–K/J	—	94008	P87
	R25S70F	20kA	70V	200V	0–2.5GHz	1.2	0.2dB	SMA–J/K	—	94010	P87
	R25B70F	20kA	70V	200V	0–2.5GHz	1.2	0.2dB	BNC–K/J	—	94012	P87
	R25T70F	20kA	70V	200V	0–2.5GHz	1.2	0.2dB	TNC–K/J	—	94014	P87
	R30NF70SM	20kA	70V	200V	0–3GHz	1.2	0.2dB	SMA–J N–K	—	94016	P87
	R25D70F	20kA	70V	200V	0–2.5GHz	1.2	0.2dB	DIN–J/K	—	94026	P87
RF filter	R05NF	20kA	—	30V	0.4–0.5GHz	1.2	0.2dB	N–J/K	90*72*35mm	—	P89
	R19NF	20kA	—	30V	1.7–1.9GHz	1.2	0.2dB	N–J/K	90*72*35mm	—	P89
	R20TF	20kA	—	30V	1.8–2.0GHz	1.2	0.2dB	TNC–K/K	90*72*35mm	—	P89
	R20NM–S	10kA	—	30V	0.8–2.0GHz	1.2	0.2dB	N–J/K	ϕ 20×90mm	94015	P89
Compound antenna proctor	R25D–FH	20kA	70V	200V	2M,0.75–2.5GHz	1.15	0.15dB	DIN–J/K	—	—	P93
	R25N–FH	20kA	70V	200V	2M,0.75–2.5GHz	1.15	0.15dB	N–J/K	—	—	P93

Remark:Imax : Maximum discharge current (Impact of current):In : Nominal discharge current ;
Uc :Max continuous operating voltage ;Up :Protection level (20kA,8/20μs)
Above products are the usual models, can be maked according to user needs for customization products.

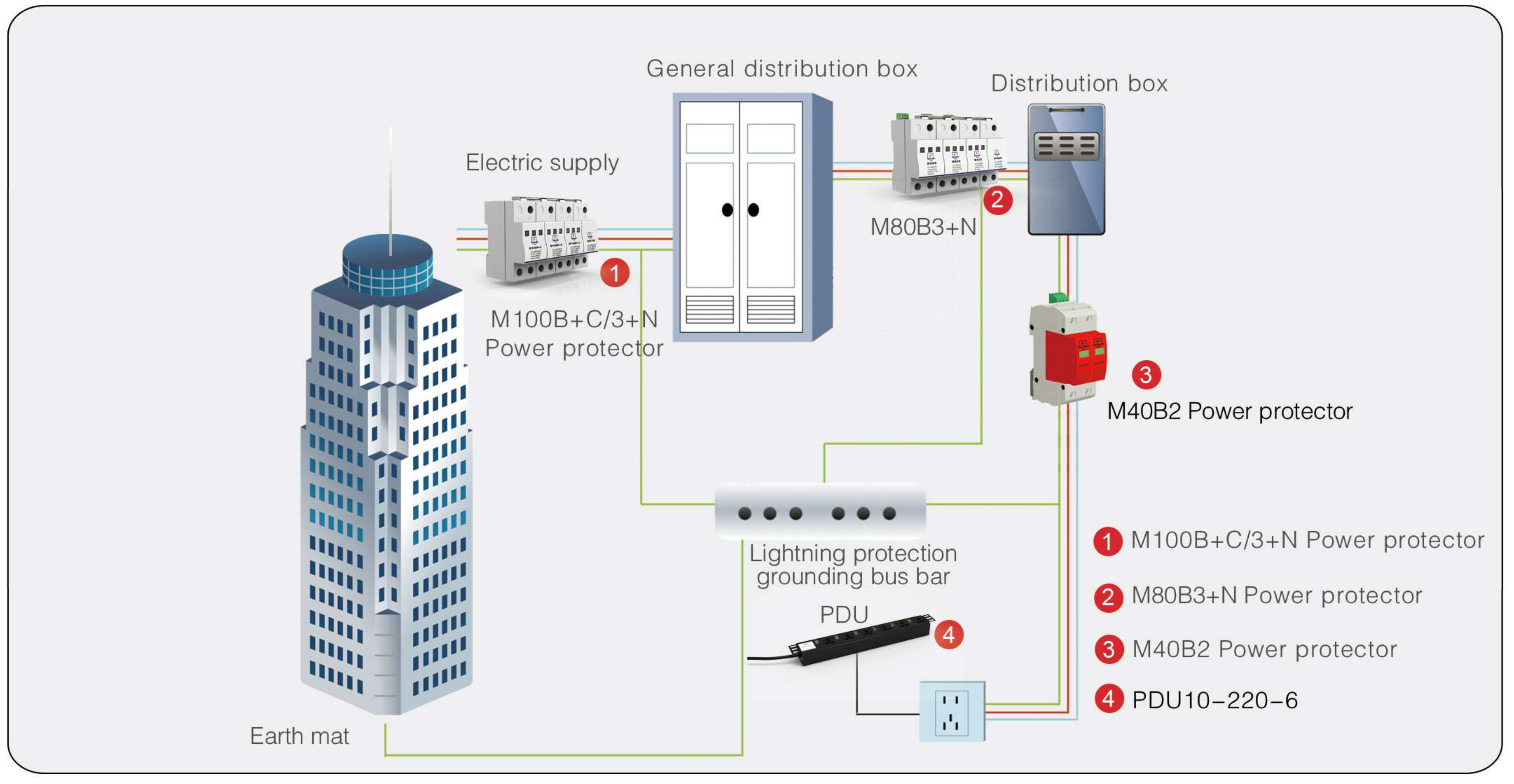
Name	Model	Main parameter Imax	In	Uc	Up	Response time	Module	Protected mode	Dimension	Page
AC/DC power supply lightning protective box		Power:10–50KW;Input/output current:5–100A;Input/output current:220/380VAC、48–1000VDC								P99
AC/DC power supply lightning protective Cabinet		Power :30–300KW;Input/output current:50–300A; Input/output voltage:220/380VAC、48–1000VDC								P100
PV distribution box	SDDL6–1 SDDL18–1	Working voltage:48–1000VDC;Max PV parallel input lines:3–20;Maximum current of every PV ports :≤125A;Output lines:1–3;lightning protect								P101
Input/output current	M40–1000	40kA	20kA	1000VDC	3000V	25ns	3	+、– – PE	90*54*65mm	P97
	M40–800	40kA	20kA	1000VDC	2500V	25ns	3	+、– – PE	90*54*65mm	P97
	M40–500	40kA	20kA	650VDC	1500V	25ns	2	+、– – PE	90*36*65mm	P97
Wind power SPD	M40W–690	40kA	20kA	700V	3000V	25ns	5	L L L N–PE	90*90*65mm	P95
	M40W–400	40kA	20kA	440V	2200V	25ns	3	L L L–PE	90*54*65mm	P95
	M40W–230	40kA	20kA	230V	1500V	25ns	2	L N–PE	90*36*65mm	P95
Wind single SPD	D12Y2	5kA	3kA	12V	40V	1ns	—	Transmission rated:10Mbps Insert loss:≤0.5dB	85*25*25mm	P67
	D12Y4	5kA	3kA	12V	40V	1ns	—		85*25*25mm	P67
	D05Y6	5kA	3kA	5V	25V	1ns	—		85*40*25mm	P67
	D36Y2	5kA	3kA	36V	120V	1ns	—		85*25*25mm	P67

Remark:Imax : Maximum discharge current (Impact of current):In : Nominal discharge current ;
Uc :Max continuous operating voltage ;Up :Protection level (20kA,8/20μs)
Standard models are shown, Customized solutions available.

Power System LPS Solution

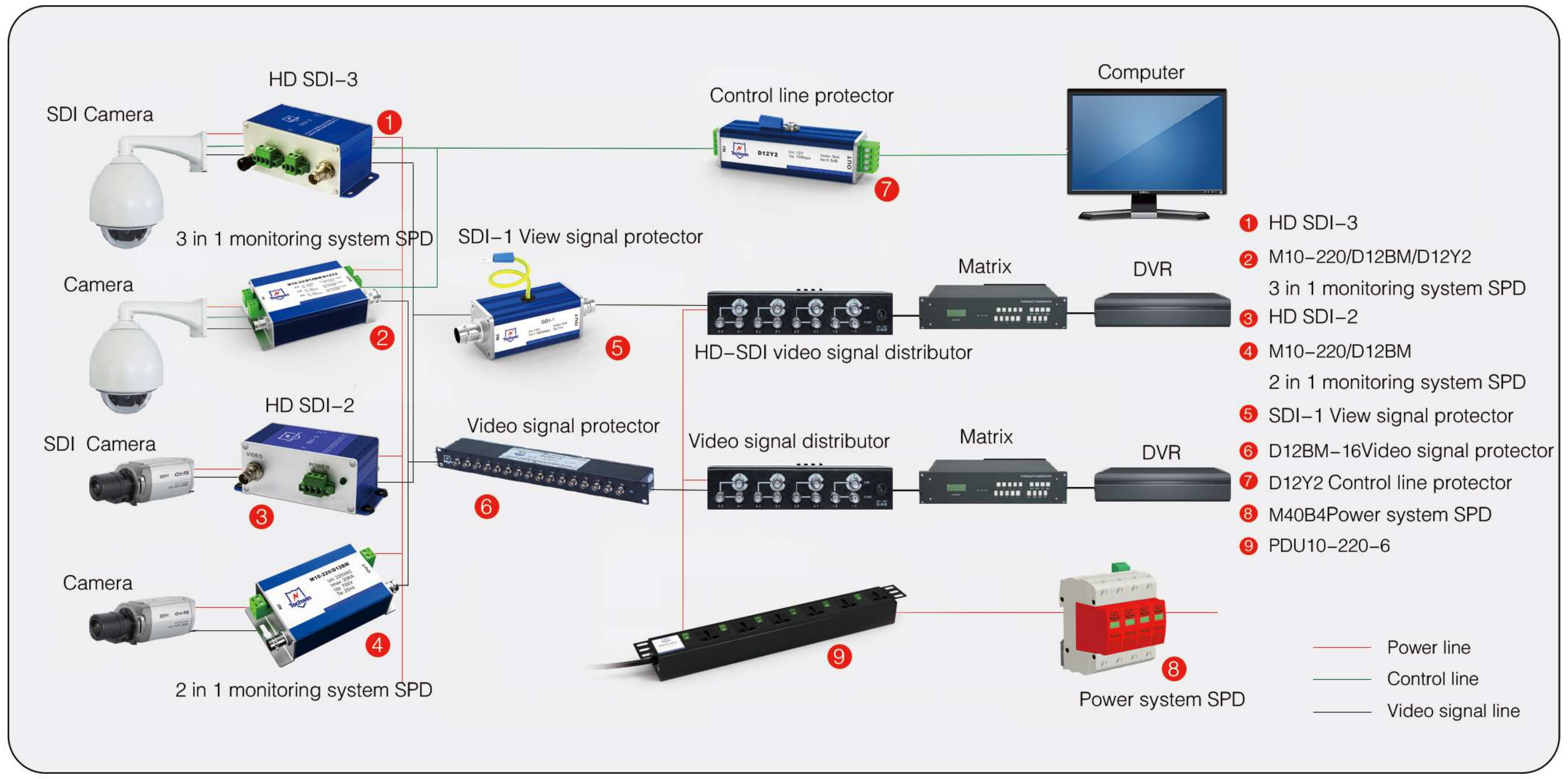


Energy release diagram

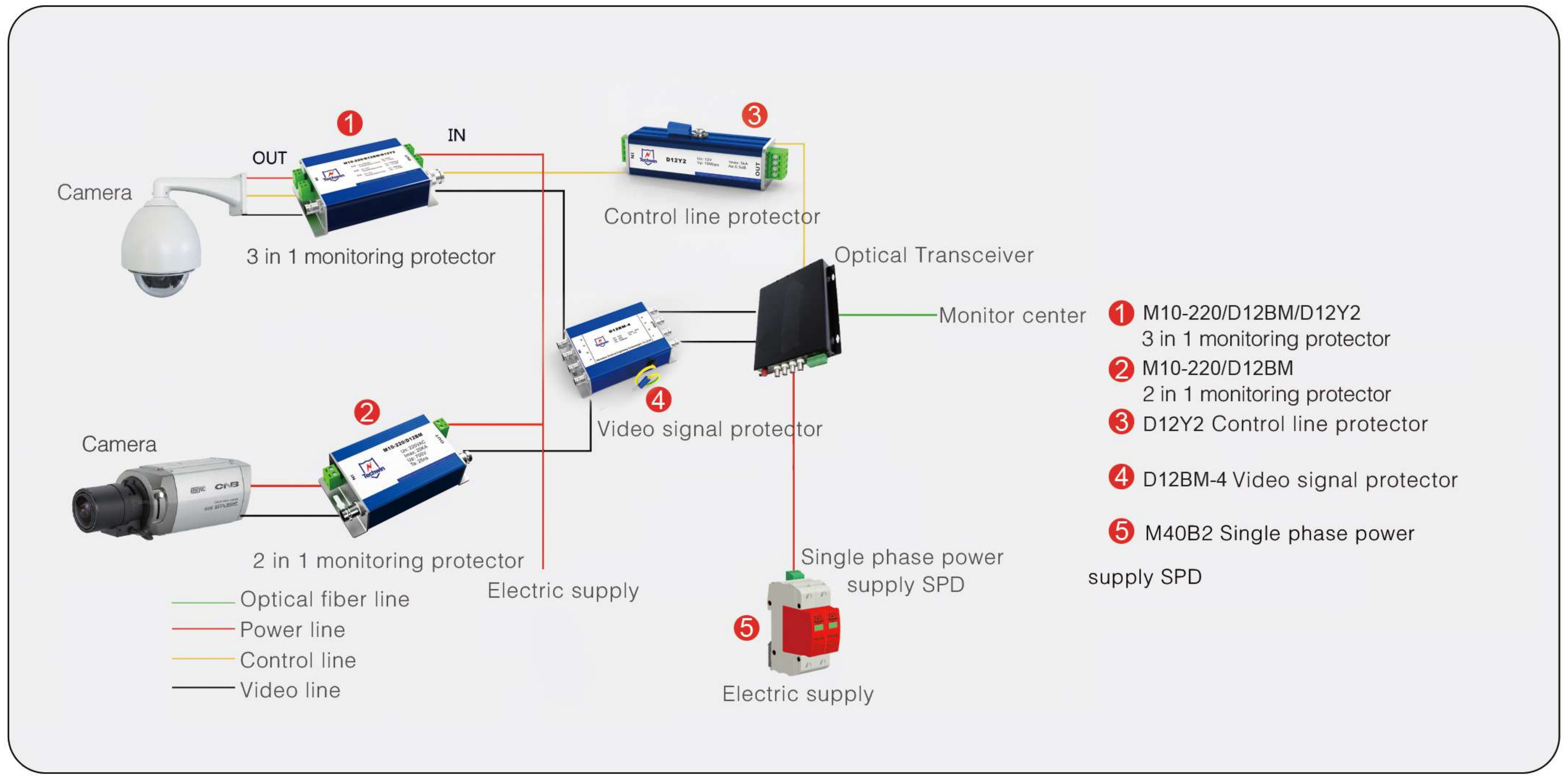


Lightning protection solution for building power system

Security industry lightning protection solution

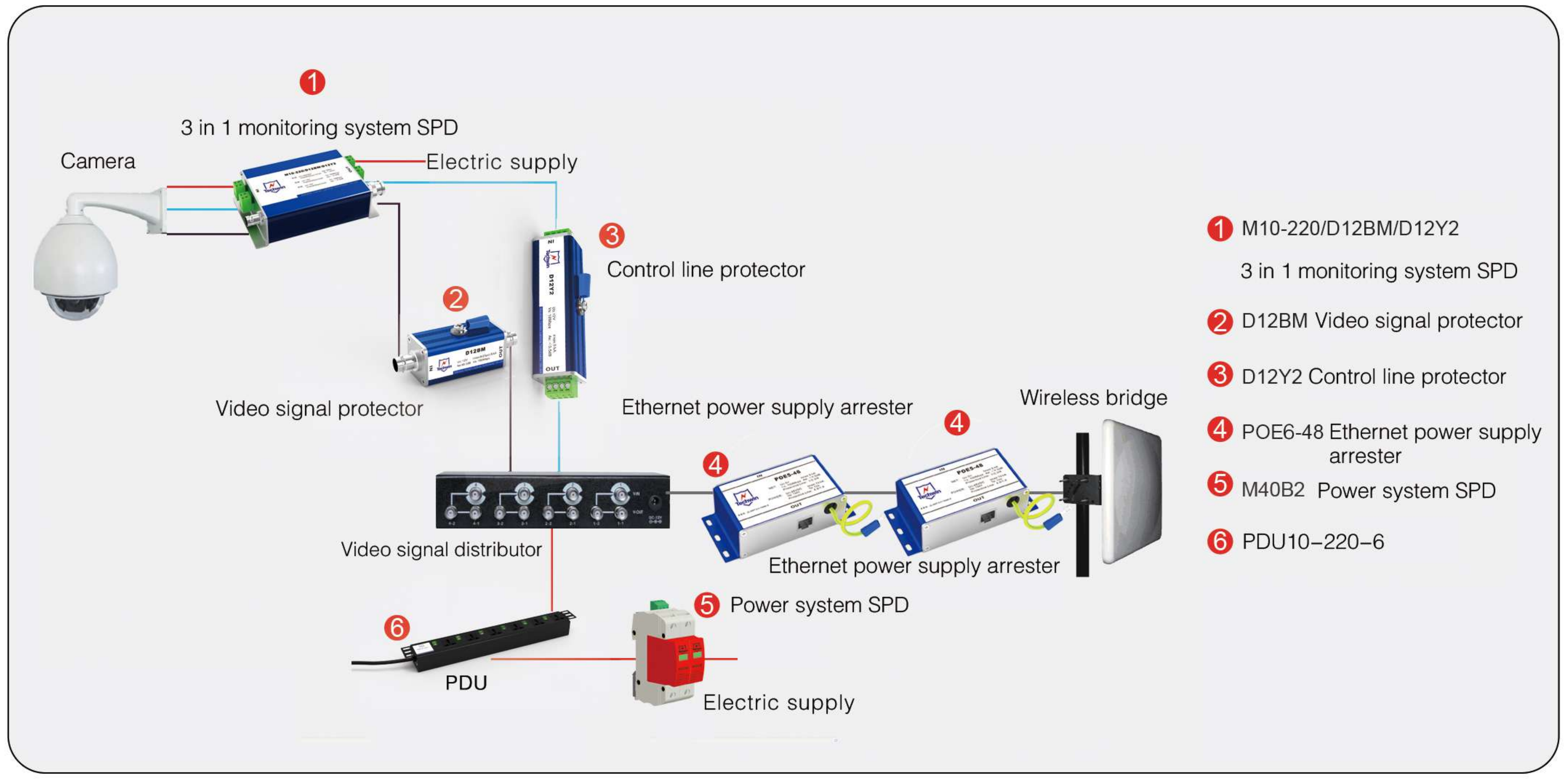


SDI SPD Solution

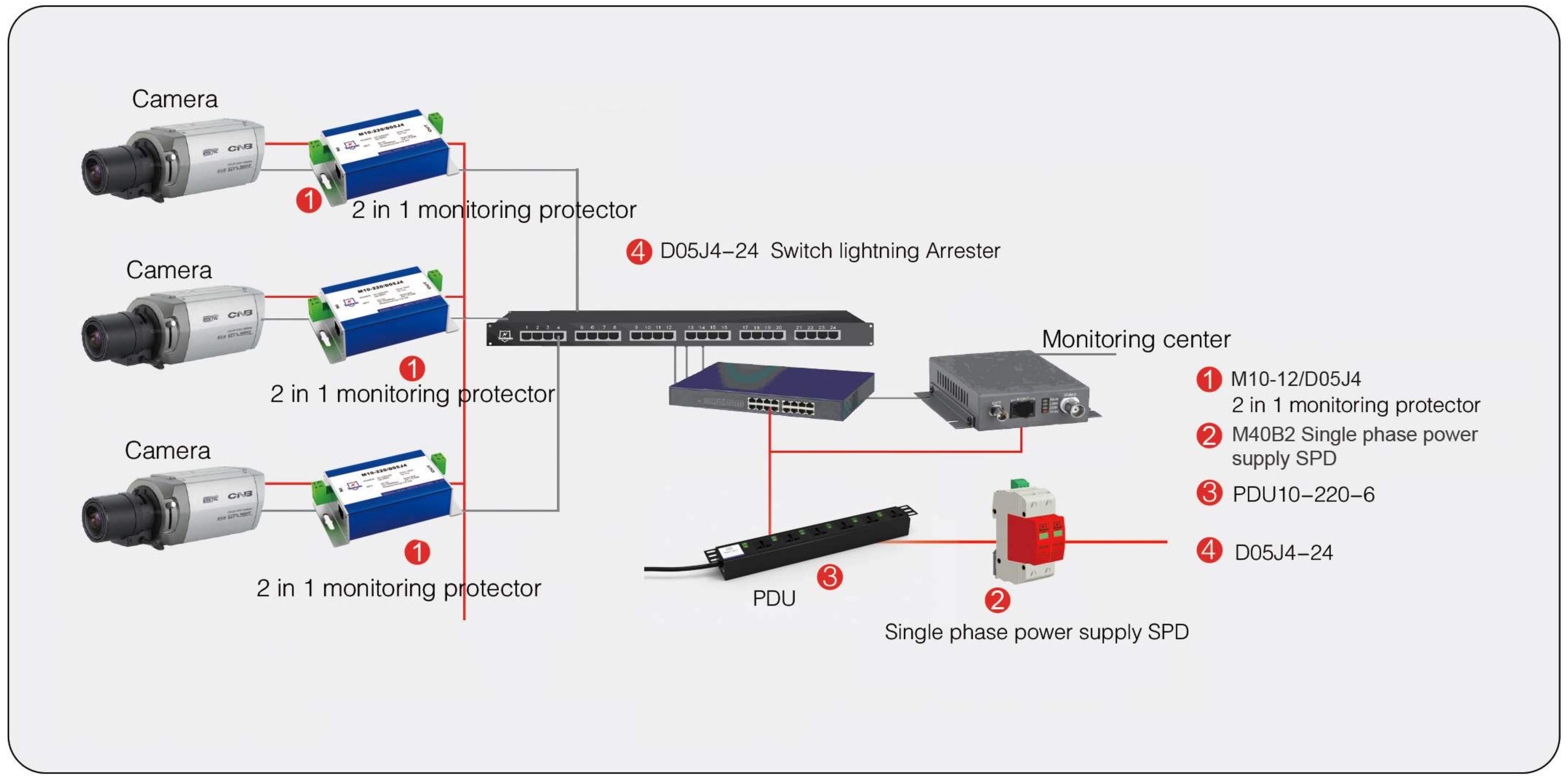


Lightning protection solutions for Monitoring system– Optical fibers transfer mode

Security industry lightning protection solution

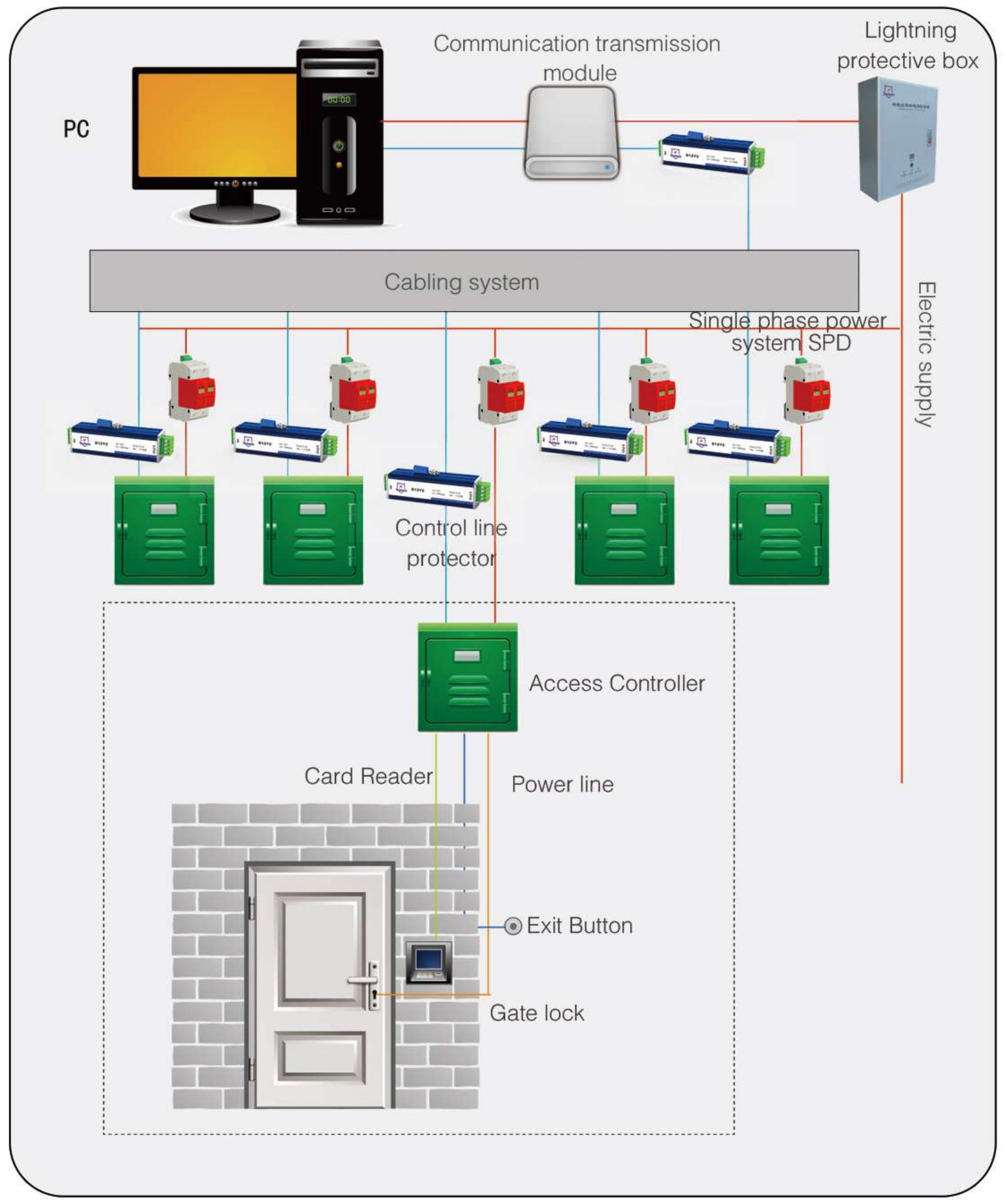


Monitoring System SPD Solution—Coaxial Transmission System

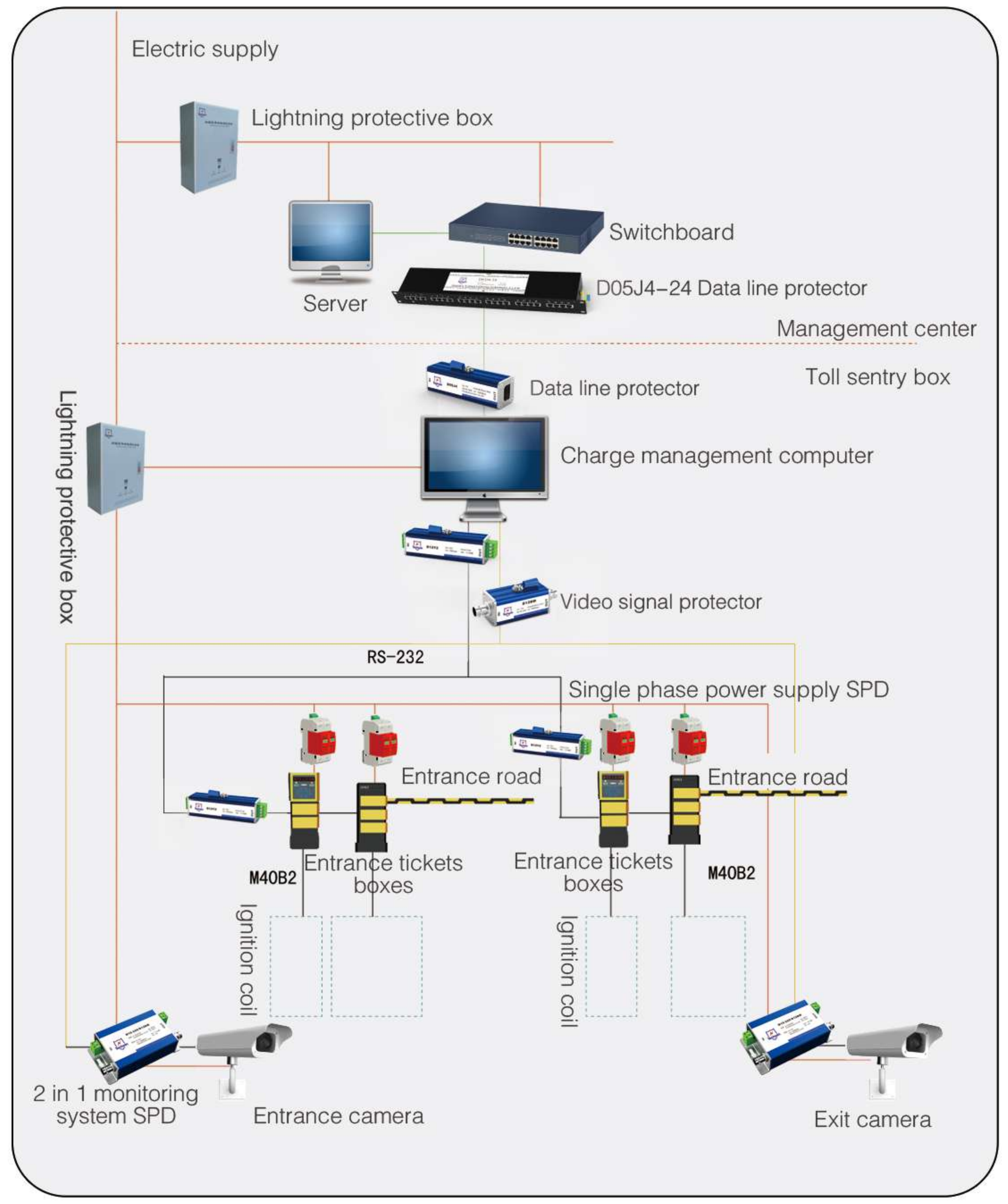


Lightning protection solution for monitoring system– Network transmission mode

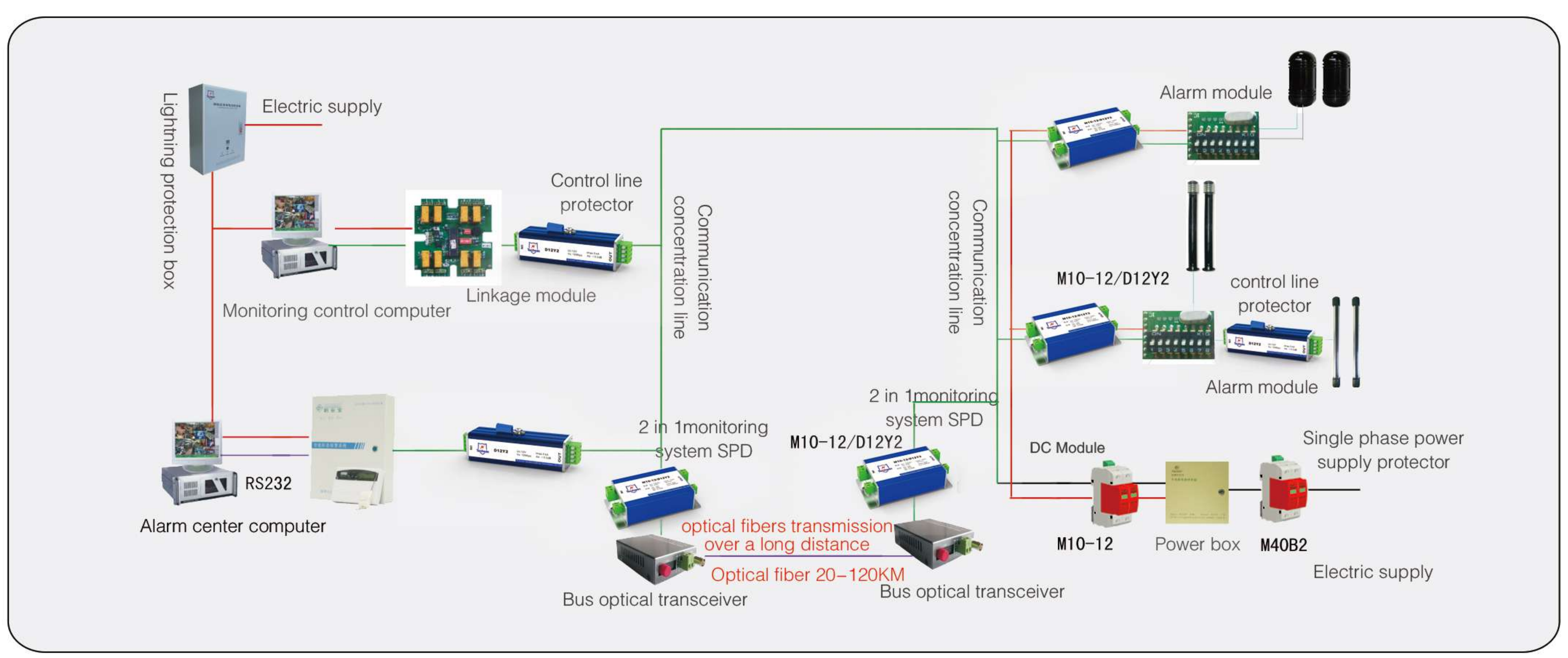
Security Industry SPD Solution



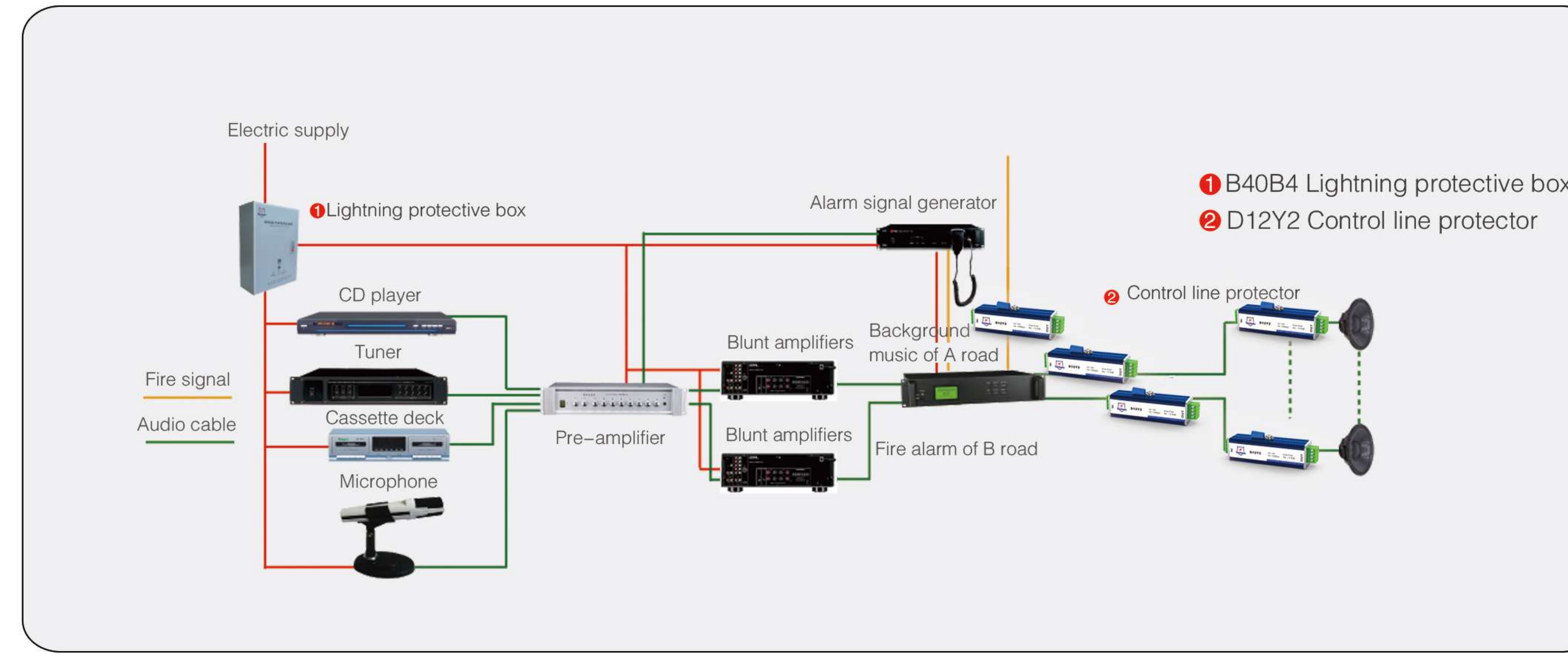
The entrance gate system SPD solution



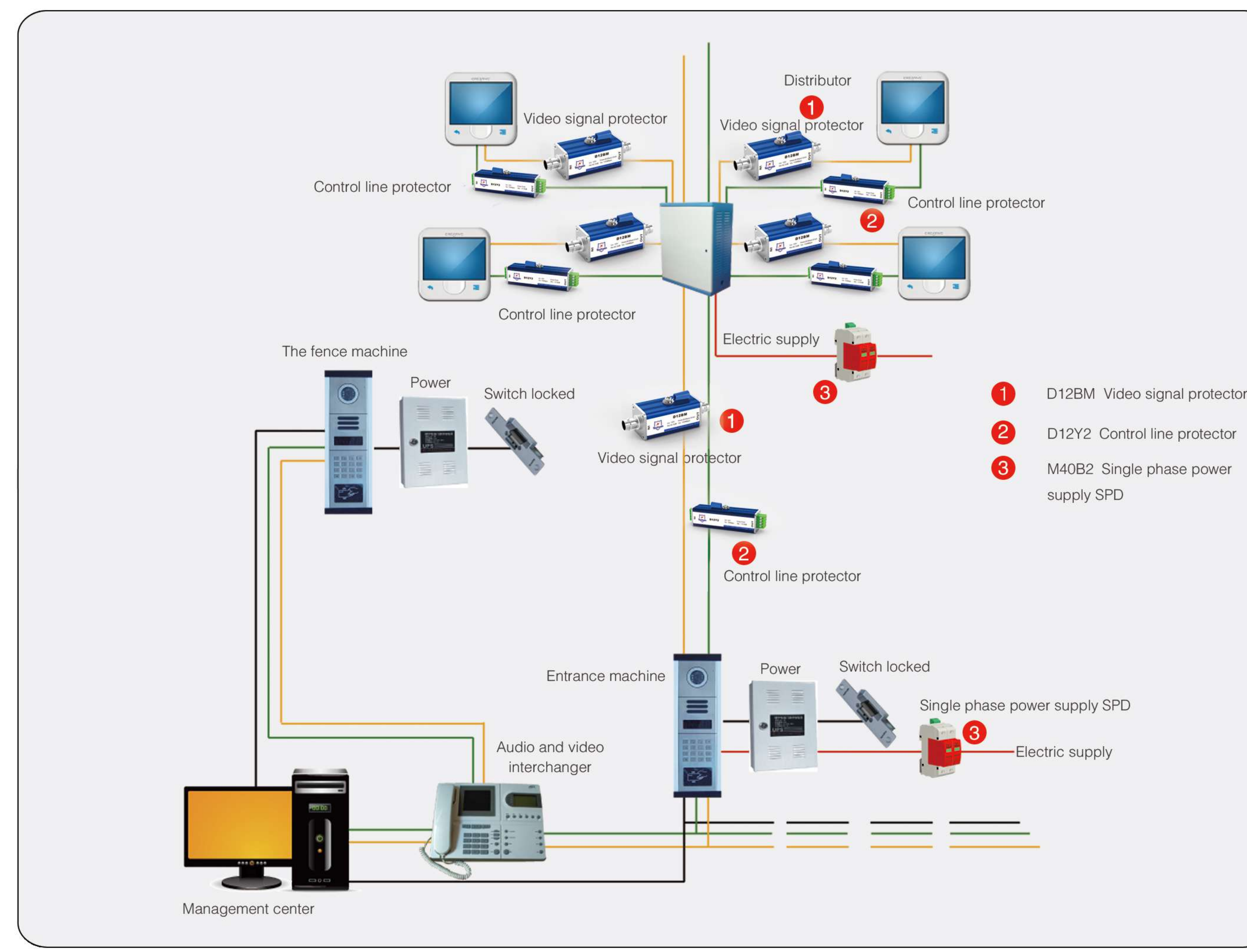
Parking system SPD solution



Perimeter alarm system lightning protection solutions

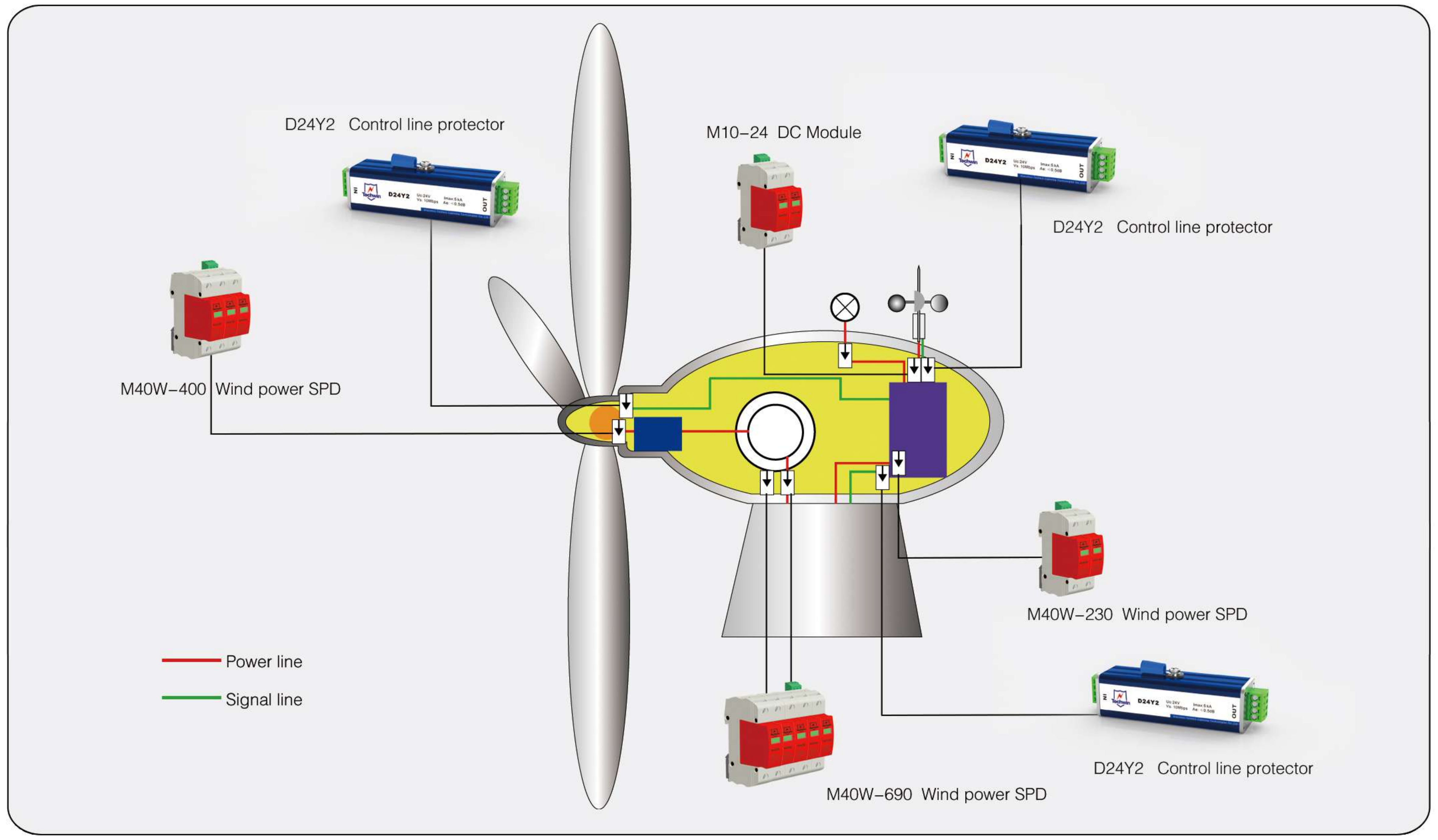


Background music system SPD solution

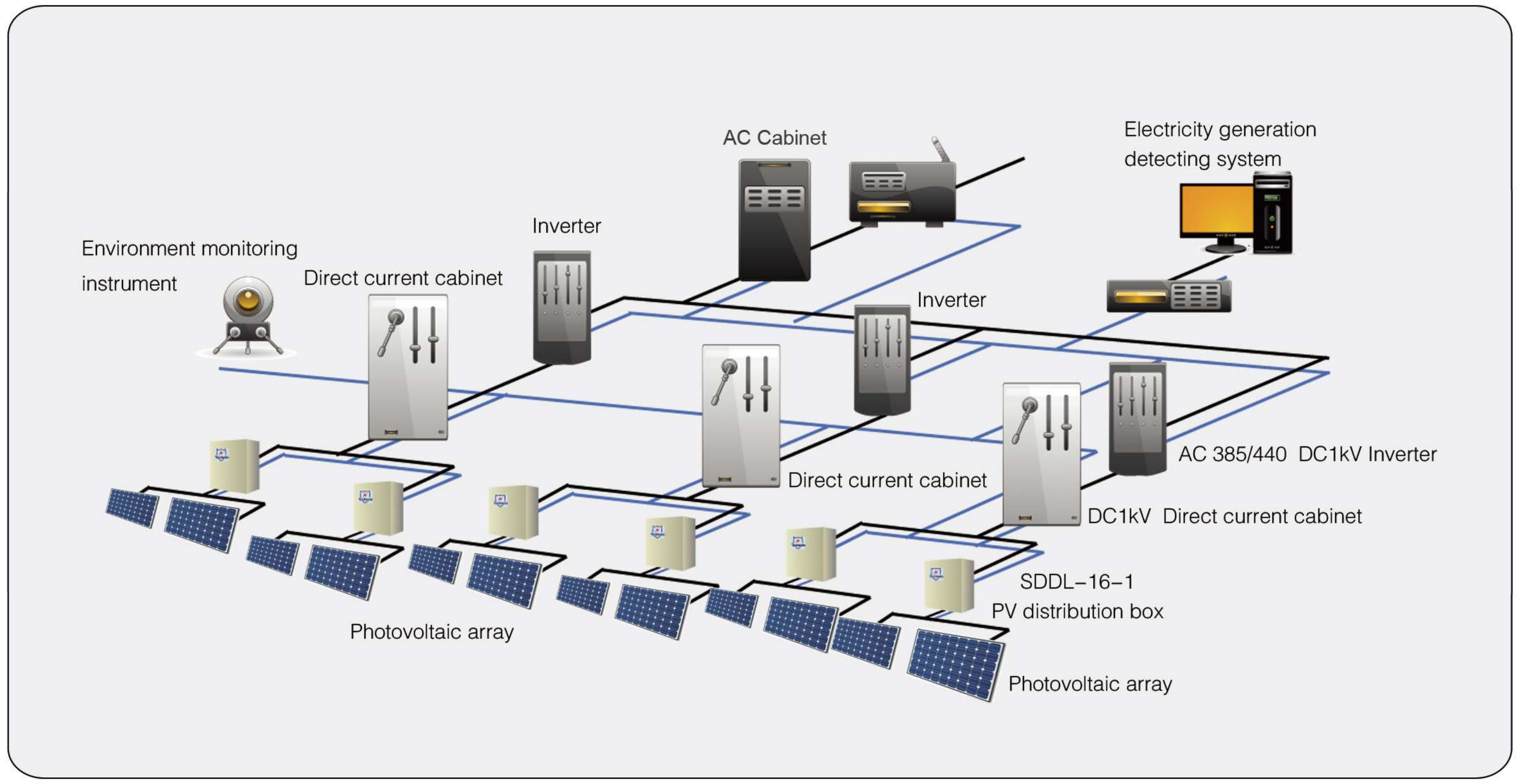


Visual Intercom system SPD solution

New Energy System SPD Solution



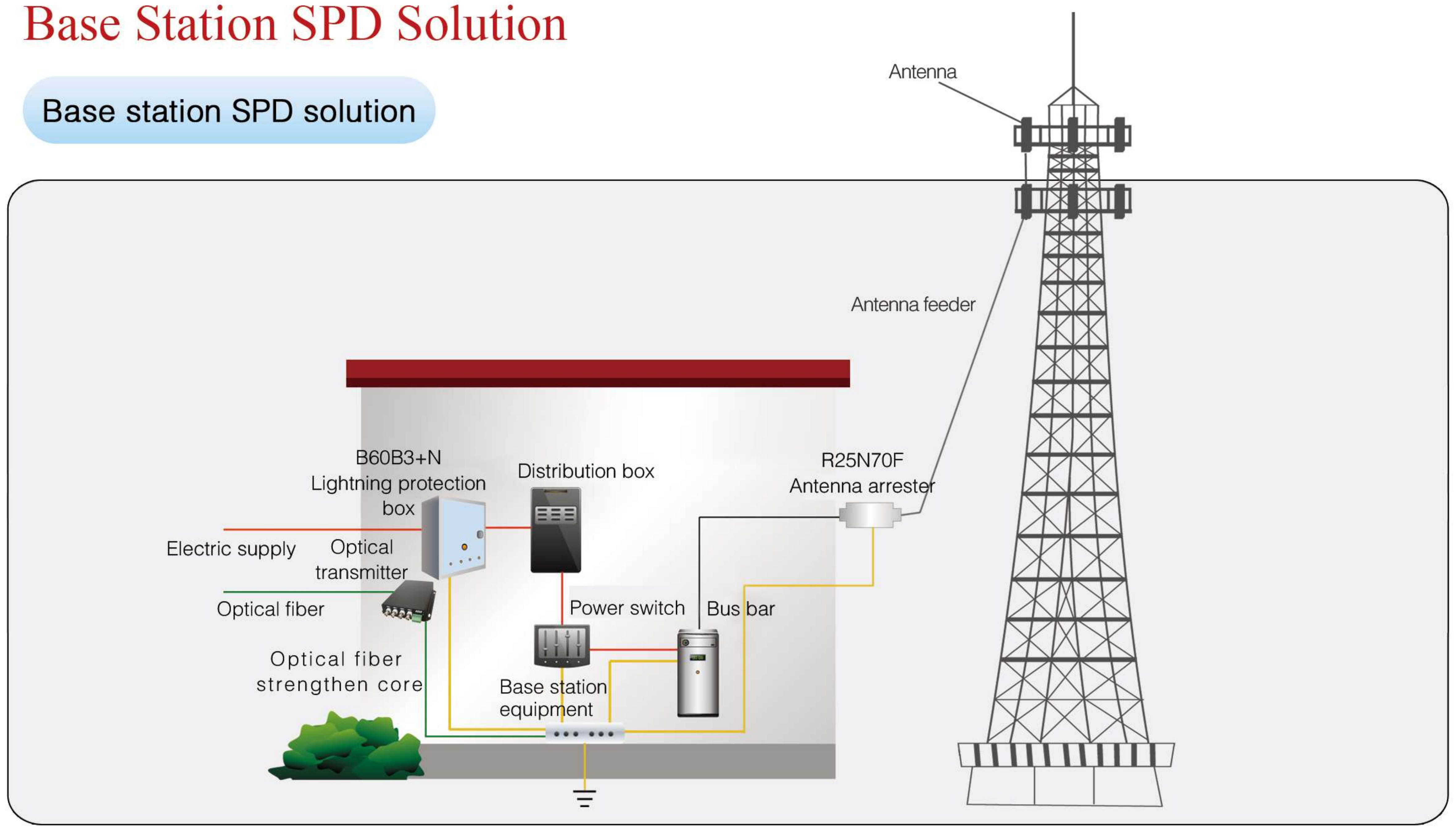
Wind turbine system SPD solution

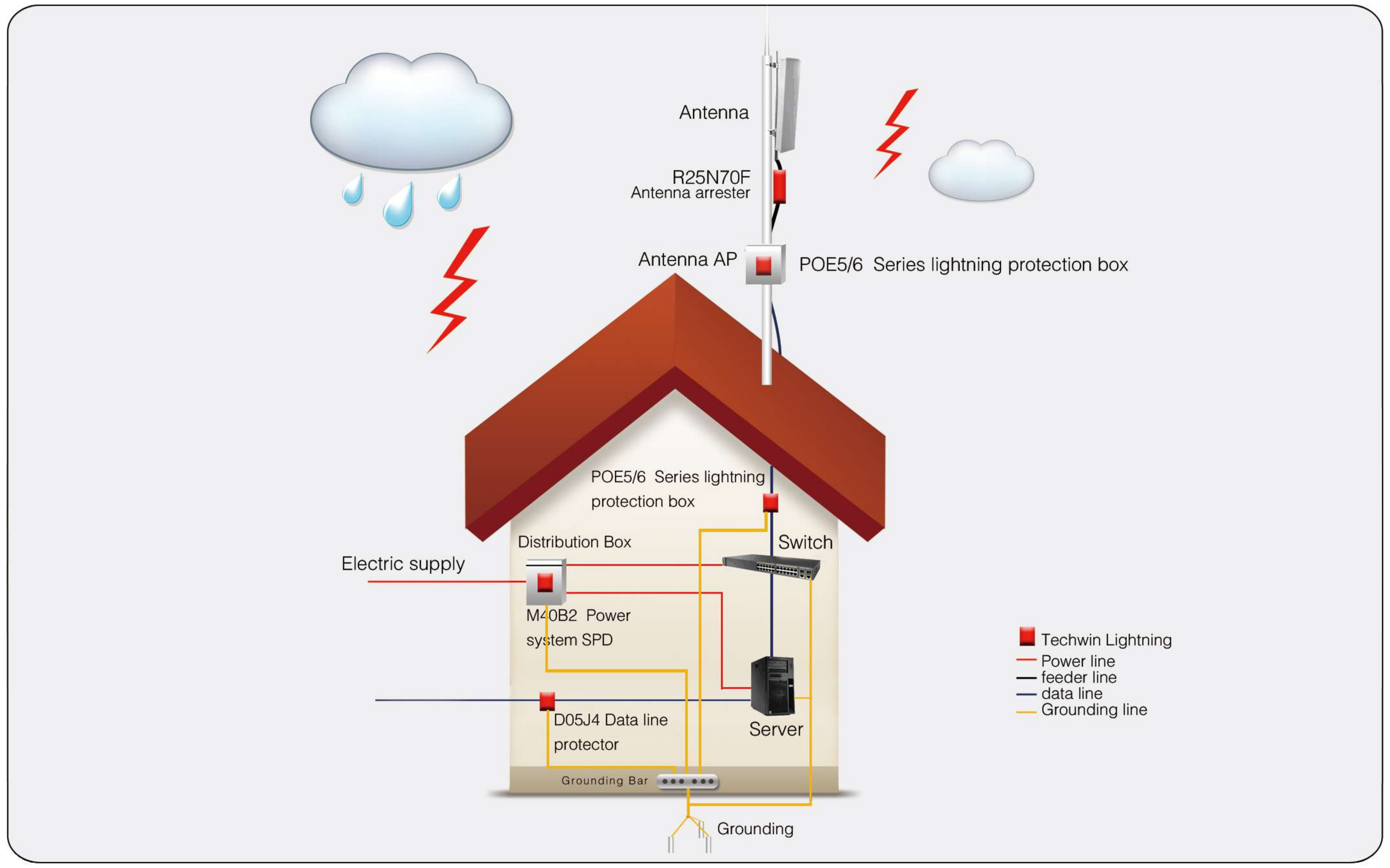


Photovoltaic power generation system lightning protective solution

Base Station SPD Solution

Base station SPD solution





WLAN SPD solution

Lightning protection box for AC power system (Parallel Type)

C Class ·40kA·220/380VAC

FEATURE

High–energy lightning protection
Lightning counter
Module warning alarm indications
Visual status indicators
Special impact fuse with high reliability
Heat turn–off technology, temperature control to protect circuit
International famous core component with excellent performance.

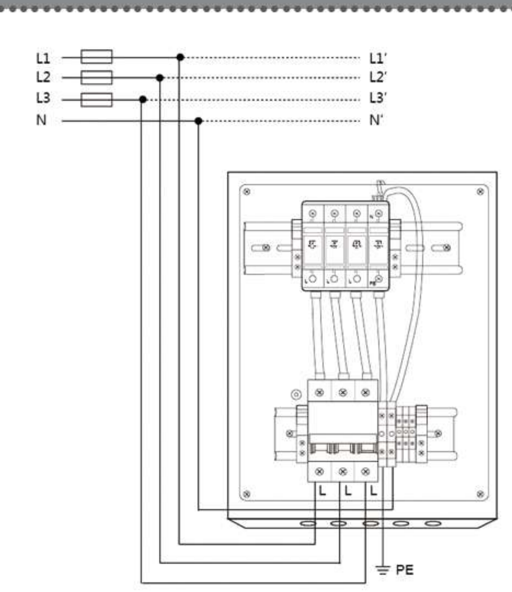
APPLICATION

Class C protection
Second–power supply
Sensitive electronic equipment
Communications room, computer room
Distribution board &distribution box in the outdoor
Telecom centers
Automatic control centers

DESCRIPTION

B40B series lightning protection boxes are mainly applicable to power distribution system for class C protection, to protect electrical equipment from the impact of lightning electromagnetic pulse induced voltage, transient operation and resonance(<100μs) over voltage and keep the critical equipment running seamlessly.

INSTALLATION INSTRUCTION



B40B3+N

TECHNICAL PARAMETER

Model	B40B2	B40B1+N	B40B4	B40B3+N
Electrical Parameter				
Lightning Protection Zone（LPZ）	1–2			
Class				
According to DIN VDE6075 Part6（Draft11.89）A1，A2	C			
According to IEC61643	II			
Nominal working voltage（Un）	220VAC		380VAC	
Max continuous operating voltage（Uc）	385VAC			
Nominal discharge current In（8/20μs）	20kA			
Max discharge current Imax（8/20μs）	40kA			
Protection level Up（In）	≤1500V			
Response time（Ta）	25ns			
Short–circuit tolerance ability at max backup fuse（Ik）	32A			
Protection model	L，N–PE,	L–N，N–PE	L1、L2、L3、N–PE,	L1、L2、L3–N,N–PE
Working conditions	Temperature：–40～+85℃ Relative humidity：≤95%			
Standards compliance	IEC 61643、EN60950			
Mechanical characteristics				
Mounting	Wall–hung type / flat type			
Status indicator	Operating &fail state indicator, lightning counter			
Max connecting line diameter	16 mm^2			
Recommend connecting line diameter	L、N Line≥10mm^2 PE Line≥16mm^2			
Largest terminal installation torque	6–8N.m			
Dimension	310*230*110 mm			
Material/surface treatment/color	A3 steel/spraying plastics/white of computer			
IP code（IEC EN 60529）	IP55			
Quantity of modules	2		4	

Lightning protection box for AC power system (Parallel Type)

Class B ·60kA·220/380VAC

FEATURE

- High–energy lightning protection
- Lightning counter
- Low residual voltage
- Fast response, remote alarm
- Visual status indicators
- Special impact fuse with high reliability
- Heat turn–off technology, temperature control to protect circuit

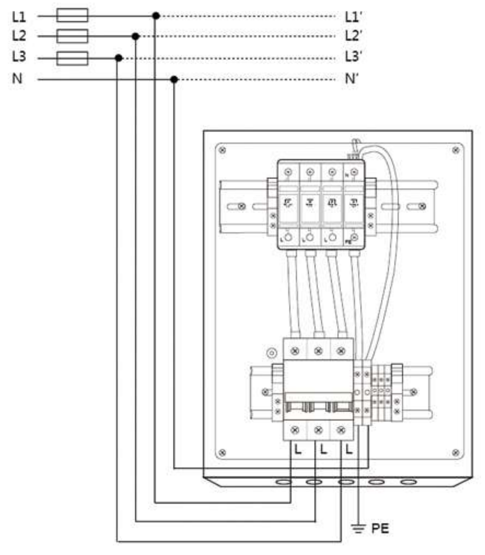
DESCRIPTION

B60B series lightning protection boxes are mainly applicable to power distribution system for class B protection, to protect electrical equipment from the impact of lightning electromagnetic pulse induced voltage, transient operation and resonance(<100µs) over voltage.

APPLICATION

- Class B protection
- Second–power supply
- Sensitive electronic equipment
- Communications room, computer room
- Electric power, factories and mines, finance, railway
- Distribution box in the outdoor
- Telecom centers
- Automatic control centers

INSTALLATION INSTRUCTION



B60B3+N

TECHNICAL PARAMETER

Model	B60B2	B60B1+N	B60B4	B60B3+N
Electrical Parameter				
Lightning Protection Zone（LPZ）	1–2			
Class				
According to DIN VDE6075 Part6 (Draft11.89) A1, A2	C			
According to IEC61643	II			
Nominal working voltage（Un）	220VAC		380VAC	
Max continuous operating voltage（Uc）	385VAC			
Nominal discharge current In（8/20μs）	30kA			
Max discharge current Imax（8/20μs）	60kA			
Limiting voltage Up 20kA (8/20μs)	≤1500V			
Up（In）	≤2000V			
Response time（Ta）	25ns			
Short–circuit tolerance ability at max backup fuse (Ik)	63A			
Protection model	L、N–PE	L–N, N–PE	L1、L2、L3、N–PE	L1、L2、L3–N,N–PE
Working conditions	Temperature –40～+85℃ Relative humidity:≤95%			
Standards compliance	IEC 61643、EN60950			
Mechanical characteristics				
Mounting	Wall–hung type / flat type			
Status indicator	Operating &fail state indicator，Lightning counter			
Max connecting line diameter	25 mm²			
Recommend connecting line diameter	L、N Line ≥16 mm² PE Line≥25 mm²			
Largest terminal installation torque	6–8N.m			
Dimension	400*300*120 mm			
Material/surface treatment/color	A3 steel/spraying plastics/white of computer			
IP code（IEC EN 60529）	IP55			
Quantity of modules	2	2	4	4

Lightning protection box for AC power system (Parallel Type)

Class B ·80kA(100kA)·220/380VAC

FEATURE

High–energy lightning protection
Lightning counter
Low residual voltage
Fast response
Remote alarm
Visual status indicators
Special impact fuse with high reliability
Heat turn–off technology, temperature control to protect circuit

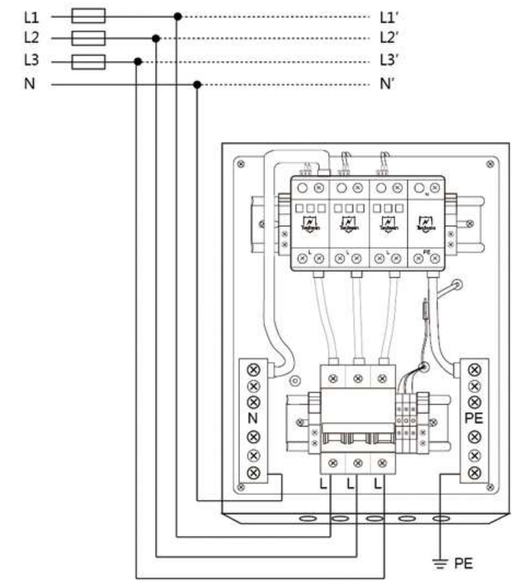
DESCRIPTION

B80B(B100B) series lightning protection boxes are mainly applicable to power distribution system for class B protection, to protect electrical equipment from the impact of lightning electromagnetic pulse induced voltage, transient operation and resonance(<100μs) over voltage.

APPLICATION

Class B protection
Second–power supply
Sensitive electronic equipment
Communications room, computer room
Electric power, factories and mines, finance, railway
Distribution box in the outdoor
Telecom centers
Automatic control centers

INSTALLATION INSTRUCTION



B100B3+N

TECHNICAL PARAMETER

Model	B80B4	B80B3+N	B100B4	B100B3+N
Electrical Parameter				
Lightning Protection Zone（LPZ）	1–2			
Class				
According to DIN VDE6075 Part6（Draft11.89）A1，A2	B			
According to IEC61643	II			
Nominal working voltage（Un）	380V/Single phase 220VAC			
Max continuous operating voltage（Uc）	385VAC			
Nominal discharge current In（8/20μs）	40kA		50kA	
Max discharge current Imax（8/20μs）	80kA		100kA	
Protection level Up 20kA (8/20μs)	≤1500V			
Up（In）	≤2500V		≤2800V	
Response time（Ta）	25ns			
Short–circuit tolerance ability at max backup fuse（Ik）	63A			
Protection model	L1、L2、L3、N–PE	L1、L2、L3–N，N–PE	L1、L2、L3、N–PE	L1、L2、L3–N，N–PE
Working conditions	Temperature: – 40 ~ + 85℃ Relative humidity: ≤95%			
Standards compliance	IEC 61643、EN60950			
Mechanical characteristics				
Mounting	Wall–hung type / flat type			
Status indicator	Operating &fail state indicator,Lightning counter			
Max connecting line diameter	25 mm^2		35mm^2	
Recommend connecting line diameter	L、N Line≥16 mm^2 PE Line≥25 mm^2		L、N Line≥25 mm^2 PE Line≥35 mm^2	
Largest terminal installation torque	6–8N.m			
Dimension	400*300*120 mm			
Material/surface treatment/color	A3 steel/spraying plastics/white of computer			
IP code（IEC EN 60529）	IP55			
Quantity of modules	4		4	

△Note: about data suits for three–phase and single–phase products.

Lightning protection box for AC power system (Parallel Type)

Class B ·120kA(160kA)·220/380VAC

FEATURE

High–energy lightning protection
Lightning counter
Low residual voltage
Fast response
Remote alarm
Visual status indicators
Special impact fuse with high reliability
Heat turn–off technology, temperature control to protect circuit

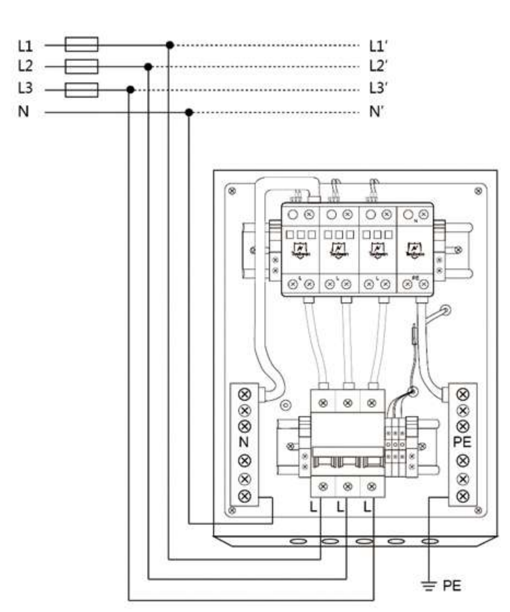
DESCRIPTION

B120B(B160B) series lightning protection boxes are mainly applicable to power distribution system for class B protection, to protect electrical equipment from the impact of lightning electromagnetic pulse induced voltage, transient operation and resonance(<100μs) over voltage.

APPLICATION

Class B protection
Second–power supply
Sensitive electronic equipment
Communications room, computer room
Electric power, factories and mines, finance, railway
Distribution box in the outdoor
Telecom centers
Automatic control centers

INSTALLATION INSTRUCTION



B120B3+N

TECHNICAL PARAMETER

Model	B120B4	B120B3+N	B160B4	B160B3+N
Electrical Parameter				
Lightning Protection Zone（LPZ）	1–2			
Class				
According to DIN VDE6075 Part6（Draft11.89）A1，A2	B			
According to IEC61643	II			
Nominal working voltage（Un）	380V/Single phase220VAC			
Max continuous operating voltage（Uc）	385VAC			
Nominal discharge current In（8/20μs）	60kA		80kA	
Max discharge current Imax（8/20μs）	120kA		160kA	
Protection level Up 20kA (8/20μs)	≤1500V			
Up（In）	3000V		3500V	
Response time（Ta）	25ns			
Protection model	L1、L2、L3、N–PE	L1、L2、L3–N，N–PE	L1、L2、L3、N–PE	L1、L2、L3–N，N–PE
Working conditions	Temperature: – 40 ~ + 85℃ Relative humidity: ≤95%			
Standards compliance	IEC 61643、EN60950			
Mechanical characteristics				
Mounting	Wall–hung type / flat type			
Status indicator	Operating &fail state indicator,Lightning counter			
Max connecting line diameter	50 mm^2			
Recommend connecting line diameter	L、N Line≥25mm^2 PE Line≥35mm^2		L、N Line≥35mm^2 PE Line≥50 mm^2	
Largest terminal installation torque	6–8N.m			
Dimension	400*300*120 mm			
Material/surface treatment/color	A3 steel/spraying plastics/white of computer			
IP code（IEC EN 60529）	IP55			
Quantity of modules	4		4	

△Note: about data suits for three–phase and single–phase products.

Lightning protection box for AC power system (Series Type)

Class B+C ·100kA(80kA)· 220/380VAC

FEATURES

High–energy lightning protection
Lightning counter
Low residual voltage
Fast response
Remote alarm
Visual status indicators
Special impact fuse with high reliability
Heat turn–off technology, temperature control to protect circuit

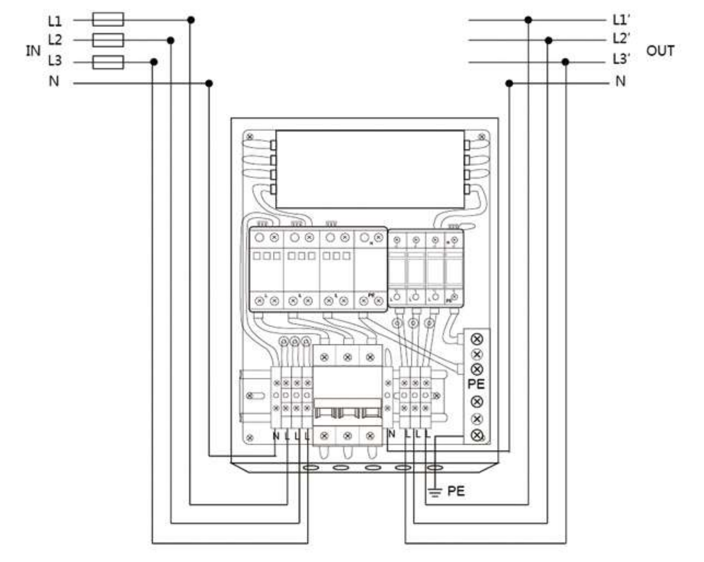
APPLICATION

Class B protection
Second–power supply
Sensitive electronic equipment
Communications room, computer room
Electric power, factories and mines, finance, railway
Distribution box in the outdoor
Telecom centers
Automatic control centers

DESCRIPTION

Lightning protection box for AC power system (Series Type) are mainly applicable to power distribution system for class B protection, to protect electrical equipment from the impact of lightning electromagnetic pulse, induced voltage, transient operation and resonance(<100μs) over voltage.

INSTALLATION INSTRUCTION



B80L63B3+N

TECHNICAL PARAMETER

Model	B100L100B3+N	B80L63B3+N
Electrical Parameter		
Lightning Protection Zone (LPZ)	1–2	
Class		
According to DIN VDE6075 Part6 (Draft11.89) A1, A2	B+C	
According to IEC61643	Ⅱ+Ⅲ	
Nominal working voltage (Un)	380V/Single phase 220VAC	
Max continuous operating voltage (Uc)	385VAC	
Rating operation current	100A	63A
Nominal discharge current In (8/20μs)	50/20kA	40/20kA
Max discharge current Imax (8/20μs)	100/40kA	80/40kA
Protection level Up (In)	≤1400V	
Response time (Ta)	25ns	
Protection model	L1、L2、L3–N, N–PE	
Working conditions	Temperature: –40～+85℃ Relative humidity:≤95%	
Standards compliance	IEC 61643、EN60950	
Mechanical characteristics		
Mounting	Wall–hung type / flat type	
Status indicator	Operating &fail state indicator,Lightning counter	
Max connecting line diameter	35 mm²	
Recommend connecting line diameter	L、N Line ≥25 mm² PE Line ≥35mm²	
Largest terminal installation torque	6–8N.m	
Dimension	450*330*140 mm	
Material/surface treatment/color	A3 steel/spraying plastics/white of computer	
IP code (IEC EN 60529)	IP55	
Quantity of modules	8	8

△Note: about data suits for three–phase and single–phase products.

Lightning protection box for AC power system (Parallel Type)

Class B ·400kA(200kA)·120/240VAC

FEATURE

High-energy lightning protection
Lightning counter
Low residual voltage
Fast response
Remote alarm
Visual status indicators
Special impact fuse with high reliability
Heat turn-off technology, temperature control to protect circuit

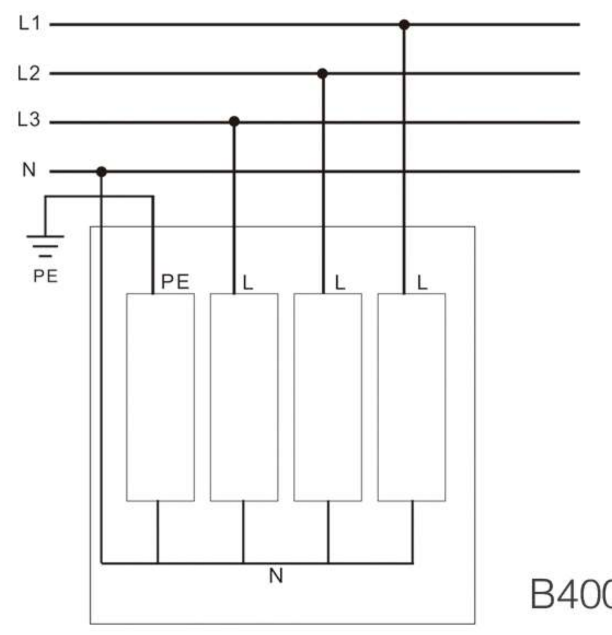
APPLICATION

Class B protection
Second-power supply
Sensitive electronic equipment
Communications room, computer room
Electric power, factories and mines, finance, railway
Distribution box in the outdoor

DESCRIPTION

Lightning protection box for AC power system (Parallel Type) are mainly applicable to power distribution system for class B protection, to protect electrical equipment from the impact of lightning electromagnetic pulse induced voltage, transient operation and resonance(<100μs) over voltage.

INSTALLATION INSTRUCTION



B400F3+N-H

TECHNICAL PARAMETER

Model	B400F3+N-H	B200F3+N-H
Electrical Parameter		
Lightning Protection Zone (LPZ)	0B-1	
Class		
According to DIN VDE6075	B	
According to IEC61643	II	
Nominal working voltage（Un）	120/240 VAC	
Max continuous operating voltage（Uc）	140/280 VAC	
Nominal discharge current In（8/20μs）	20kA	
Max discharge current Imax（8/20μs）	400kA	200kA
Protection level Up	0.8kV(L-N), 1.2kV(L-L),0.8kV(N-PE)	
Response time Ta	25ns	
Protection model	L-N,L-L, N-PE	
Working conditions	Temperature: －40～＋85℃ Relative humidity:≤95%(25℃)	
Standards compliance	IEC 61643、EN60950、UL1449	
Mechanical characteristics		
Mounting	Wall-hung type / flat type	
Status indicator	Operating &fail state indicator,Lightning counter	
Recommend connecting line diameter	≥16mm²	
Material/surface treatment/color	PA66GF30 V0	
Dimension	400*300*200mm	
IP code（IEC EN 60529）	IP65	
Quantity of modules	8	4

Lightning protection box for AC power system (Parallel Type)

Class C ·50kA(30kA)·127VAC

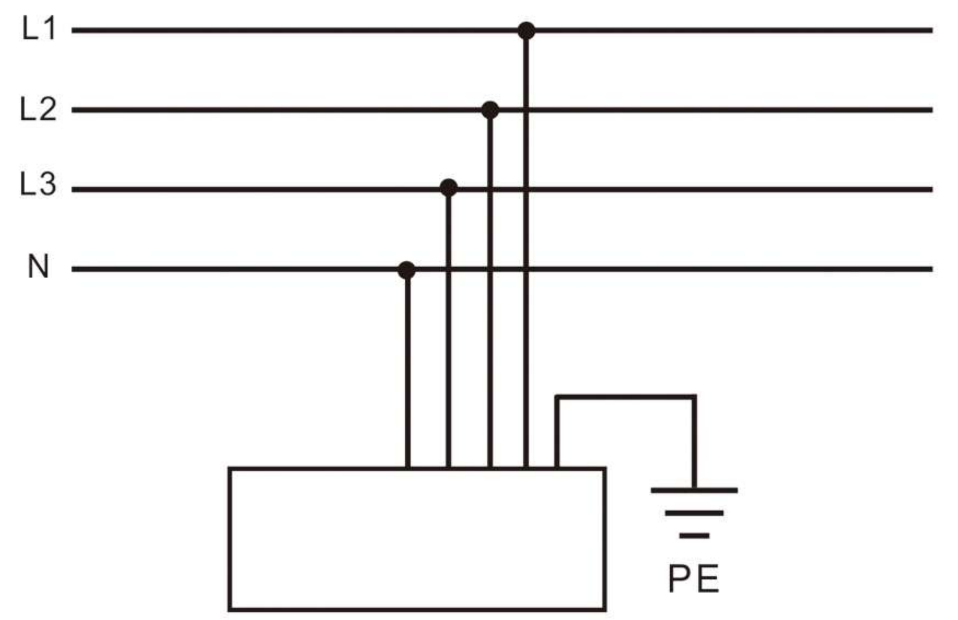
FEATURE

Temperature control to protect circuit.
Status indicators
Module warning alarm indications
International famous core component with excellent performance.

APPLICATION

Industrial and civilian power grid
Electrical distribution facilities, power distribution cabinet
AC/DC distribution board

INSTALLATION INSTRUCTION



HM50F3N

DESCRIPTION

Lightning protection box for AC power system (Parallel Type) are mainly applicable to power distribution system for class C protection, to protect electrical equipment from the impact of lightning electromagnetic pulse induced voltage, transient operation and resonance(<100μs) over voltage.

TECHNICAL PARAMETER

Model	HM50F1N	HM50F3N
Electrical Parameter		
Lightning Protection Zone (LPZ)	1–2	
Class		
According to DIN VDE6075	C	
According to IEC61643	II	
Nominal working voltage（Un）	127VAC	
Max continuous operating voltage（Uc）	160VAC	
Nominal discharge current In（8/20μs）	30kA	
Max discharge current Imax（8/20μs）	50kA	
Protection level Up	900V（20kA，8/20μs）	
Response time Ta	25ns	
Protection model	L–N，N–PE	L1、L2、L3–N，N–PE
Working conditions	Temperature:－40～＋85℃ Relative humidity:≤95%(25℃)	
Standards compliance	IEC 61643、EN60950、UL1449	
Mechanical characteristics		
Mounting	Wall–hung type / flat type	
Status indicator	Operating &fail state indicator,Lightning counter	
Max connecting line diameter	16 mm²	
Recommend connecting line diameter	L、N Line ≥6mm² PE Line ≥10mm²	
Material/surface treatment/color	ABS	Aluminium alloy
Dimension	178*120*60mm	185*118*78mm
IP code（IEC EN 60529）	IP20	

AC module

Class C ·40kA·220/380VAC

FEATURE

Visual status indicators
Large discharge current, fast response.
Standardized module design, easy to install, simple for maintenance
Small leakage current and change rate, low residual voltage
Temperature control to protect circuit, thermal disconnect device
Surge protection device with N–PE residual current spark gap as 3+1

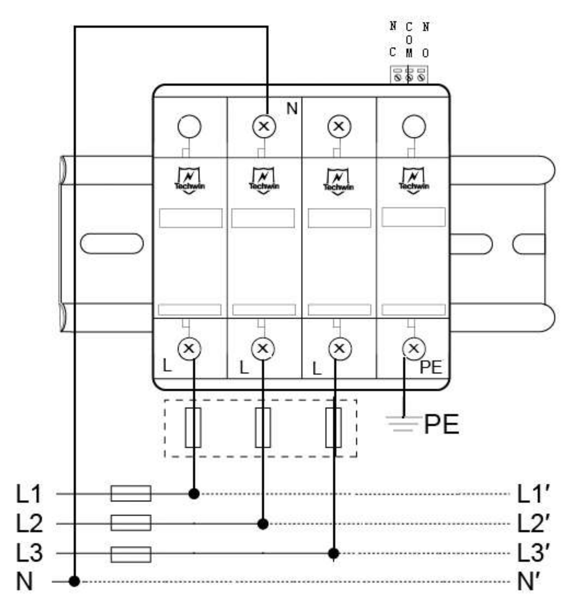
APPLICATION

Class C protection
Industrial electrical network
Civilian power grid
Automated machine room
Substation main control room.
Electrical distribution facilities
Power distribution cabinet, switch cabinet
AC distribution board

DESCRIPTION

M40B series power supply system AC module are mainly applicable to power distribution system for class C protection, to protect electrical equipment from the impact of lightning electromagnetic pulse, induced over voltage, transient operation and resonance(<100μs) over voltage.

INSTALLATION INSTRUCTION



M40B3+N

TECHNICAL PARAMETER

Model	M40B	M40B2	M40B1+N	M40B4	M40B3+N
Electrical Parameter					
Lightning Protection Zone（LPZ）	1–2				
Class					
According to DIN VDE6075 Part6（Draft11.89）A1,A2	C				
According to IEC61643	II				
Nominal working voltage（Un）		220VAC		380VAC	
Max continuous operating voltage（Uc）	385VAC				
Nominal discharge current In（8/20μs）	20kA				
Max discharge current Imax（8/20μs）	40kA				
Protection level Up(In)	≤1700V				
Response time（Ta）	25ns				
Protection model	L–PE	L、N–PE	L–N, N–PE	L1、L2、L3、N–PE	L1、L2、L3–N, N–PE
Working conditions	Temperature: –40～+85℃ Relative humidity:≤95%				
Standards compliance	IEC 61643、EN60950				
Mechanical characteristics					
Mounting	DIN rail mounting 35mm				
Status indicator	Operating &fail state indicator				
Max connecting line diameter	25 mm^2				
Recommend connecting line diameter	L、N线≥10mm^2 PE线≥16mm^2				
Largest terminal installation torque	6–8N.m				
Dimension	90*18*65mm	90*36*65mm		90*72*65mm	
Material	PA66GF30Vo				
IP code（IEC EN 60529）	IP20				
Quantity of modules	1	2	2	4	4

High-energy AC module

Class B ·60kA·220/380VAC

FEATURE

Remote alarm
Large discharge current, fast response.
Standardized module design, easy to install, simple for maintenance
Small leakage current and change rate, low residual voltage
Temperature control to protect circuit, thermal disconnect device
Surge protection device with N–PE residual current spark gap as 3+1

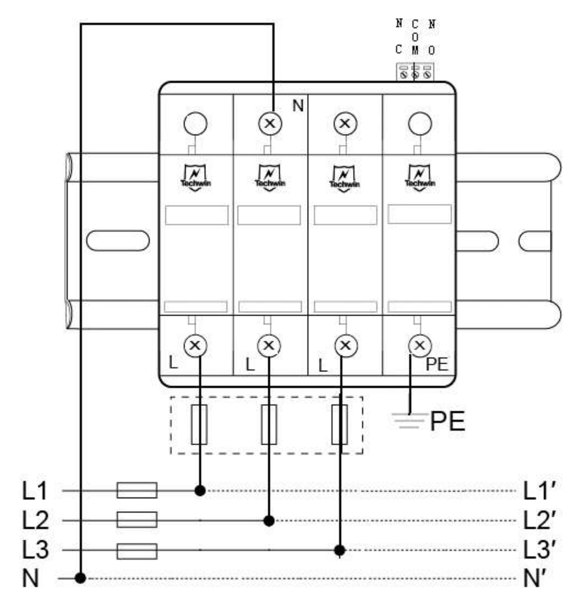
DESCRIPTION

M60B series power supply system AC module are mainly applicable to power distribution system for class B protection, to protect electrical equipment from the impact of lightning electromagnetic pulse, induced over voltage, transient operation and resonance(<100μs) over voltage.

APPLICATION

Class B protection
Industrial electrical network
Civilian power grid
Automated machine room
Substation main control room.
Electrical distribution facilities
Power distribution cabinet, switch cabinet
AC distribution board

INSTALLATION INSTRUCTION



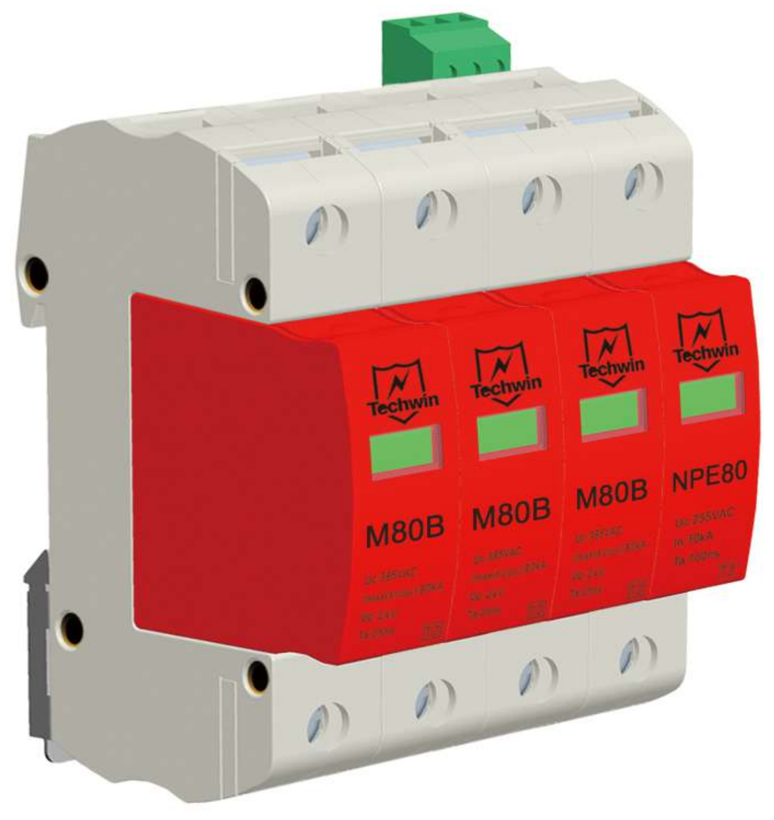
M60B3+N

TECHNICAL PARAMETER

Model	M60B	M60B2	M60B1+N	M60B4	M60B3+N
Electrical Parameter					
Lightning Protection Zone（LPZ）	1–2				
Class					
According to DIN VDE6075 Part6（Draft11.89）A1,A2	B				
According to IEC61643	II				
Nominal working voltage（Un）	220VAC			380VAC	
Max continuous operating voltage（Uc）	385VAC				
Nominal discharge current In（8/20μs）	30kA				
Max discharge current Imax（8/20μs）	60kA				
Protection level Up 20kA(8/20μs)	≤1700V				
Up(In)(8/20μs)	≤2000V				
Response time（Ta）	25ns				
Protection model	L–PE	L、N–PE	L–N, N–PE	L1、L2、L3、N–PE	L1、L2、L3–N，N–PE
Working conditions	Temperature:－40～＋85℃ Relative humidity:≤95%				
Standards compliance	IEC 61643、EN60950				
Mechanical characteristics					
Mounting	DIN rail mounting 35mm				
Status indicator	Operating &fail state indicator				
Max connecting line diameter	25 mm²				
Recommend connecting line diameter	L、N线≥16mm² PE线≥25mm²				
Largest terminal installation torque	6–8N.m				
Dimension	90*18*65mm	90*36*65mm		90*72*65mm	
Material	PBTGF20Vo				
IP code（IEC EN 60529）	IP20				
Quantity of modules	1	2	2	4	4

High-energy AC module

Class B ·80kA·220/380VAC



FEATURES

Remote alarm

Large discharge current, fast response.

Standardized module design, easy to install, simple for maintenance

Newest arcing technology, avoid fire accident thoroughly

Special impact fuse with high reliability

International famous core component with excellent performance

DESCRIPTION

M80B series power supply system AC module are mainly applicable to power distribution system for class B protection, to protect electrical equipment from the impact of lightning electromagnetic pulse, induced over voltage, transient operation and resonance(<100 μ s) over voltage.

APPLICATION

Class B protection

Industrial electrical network, civilian power grid

Automated machine room

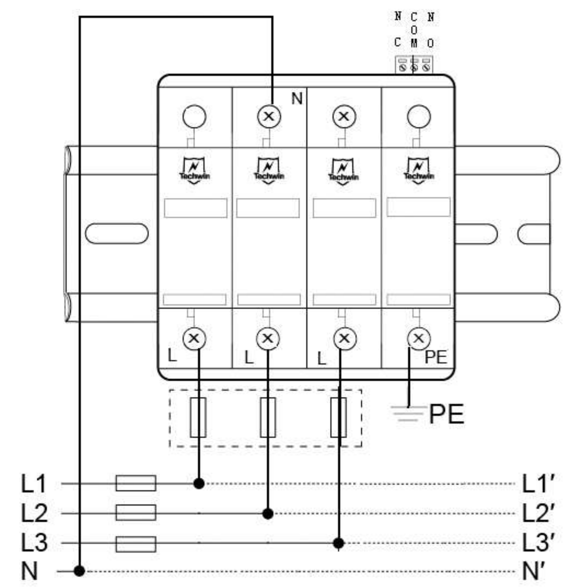
Substation main control room.

Electrical distribution facilities

Power distribution cabinet, switch cabinet

AC distribution board, distribution box

INSTALLATION INSTRUCTION



M80B3+N

TECHNICAL PARAMETER

Model	M80B	M80B2	M80B1+N	M80B4	M80B3+N
Electrical Parameter					
Lightning Protection Zone（LPZ）	1–2				
Class					
According to DIN VDE6075 Part6（Draft11.89）A1,A2	B				
According to IEC61643	II				
Nominal working voltage（Un）	220VAC			380VAC	
Max continuous operating voltage（Uc）	385VAC				
Nominal discharge current In（8/20 μ s）	40kA				
Max discharge current Imax（8/20 μ s）	80kA				
Protection level Up 20kA(8/20 μ s)	≤1500V				
Up(In)(8/20 μ s)	≤2000V				
Response time（Ta）	25ns				
Protection model	L–PE	L、N–PE	L–N, N–PE	L1、L2、L3、N–PE	L1、L2、L3–N，N–PE
Working conditions	Temperature: – 40 ~ + 85℃ Relative humidity:≤95%				
Standards compliance	IEC 61643、EN60950				
Mechanical characteristics					
Mounting	DIN rail mounting 35mm				
Status indicator	Operating &fail state indicator				
Max connecting line diameter	35 mm^2				
Recommend connecting line diameter	L、N Line ≥16mm^2 PE Line ≥25mm^2				
Largest terminal installation torque	6–8N.m				
Dimension	90*18*65mm	90*36*65mm		90*72*65mm	
Material	PBTGF20Vo				
IP code（IEC EN 60529）	IP20				
Quantity of modules	1	2	2	4	4

High-energy AC module

Class B ·100kA·220/380VAC

FEATURES

Remote alarm

Large discharge current, fast response.

Standardized module design, easy to install, simple for maintenance

Newest arcing technology, avoid fire accident thoroughly

Special impact fuse with high reliability

International famous core component with excellent performance

DESCRIPTION

M100B series power supply system AC module are mainly applicable to power distribution system for class B protection, to protect electrical equipment from the impact of lightning electromagnetic pulse, induced over voltage, transient operation and resonance(<100μs) over voltage.

APPLICATION

Class B protection

Industrial electrical network, civilian power grid

Automated machine room

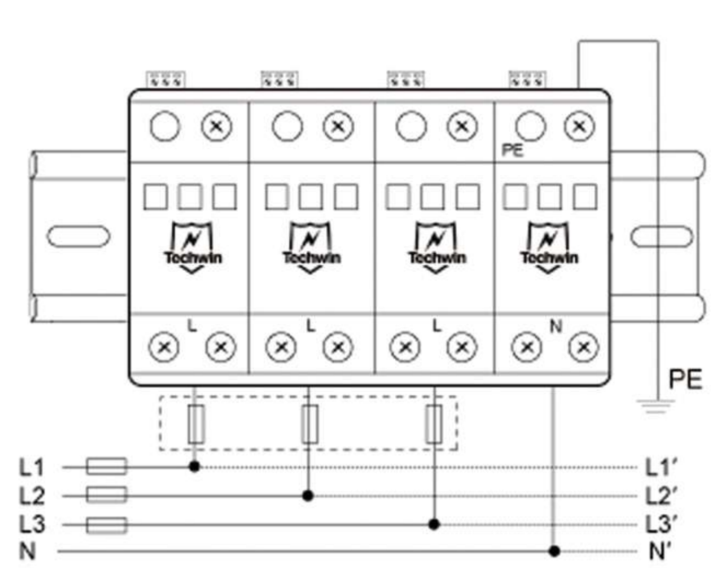
Substation main control room.

Electrical distribution facilities

Power distribution cabinet, switch cabinet

AC distribution board, distribution box

INSTALLATION INSTRUCTION



M100B4

TECHNICAL PARAMETER

Model	M100B	M100B2	M100B1+N	M100B4	M100B3+N
Electrical Parameter					
Lightning Protection Zone（LPZ）	1–2				
Class					
According to DIN VDE6075 Part6（Draft11.89）A1,A2	B				
According to IEC61643	II				
Nominal working voltage（Un）	220VAC			380VAC	
Max continuous operating voltage（Uc）	385VAC				
Nominal discharge current In（8/20μs）	50kA				
Max discharge current Imax（8/20μs）	100kA				
Protection level Up 20kA(8/20μs)	≤1500V				
Up(In)(8/20μs)	≤2800V				
Response time（Ta）	25ns				
Protection model	L–PE	L、N–PE	L–N, N–PE	L1、L2、L3、N–PE	L1、L2、L3–N，N–PE
Working conditions	Temperature: – 40 ~ + 85℃ Relative humidity:≤95%				
Standards compliance	IEC 61643、EN60950				
Mechanical characteristics					
Mounting	DIN rail mounting 35mm				
Status indicator	Operating &fail state indicator				
Max connecting line diameter	35 mm²				
Recommend connecting line diameter	L、N Line ≥25mm² PE Line ≥35mm²				
Largest terminal installation torque	6–8N.m				
Dimension	90*36*65mm	90*72*65mm		90*144*65mm	
Material	PBTGF20Vo				
IP code（IEC EN 60529）	IP20				
Quantity of modules	1	2	2	4	4

High-energy AC module

Class B ·120kA·220/380VAC

FEATURES

Remote alarm
Large discharge current, fast response.
Standardized module design, easy to install, simple for maintenance
Newest arcing technology, avoid fire accident thoroughly
Special impact fuse with high reliability
International famous core component with excellent performance

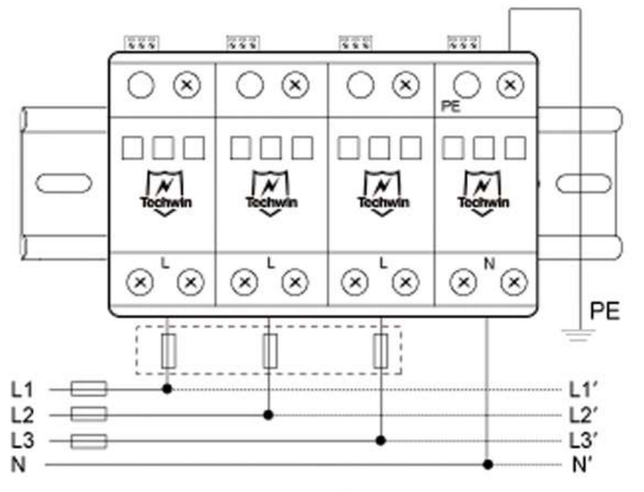
APPLICATION

Class B protection
Industrial electrical network
Civilian power grid
Automated machine room
Substation main control room.
Electrical distribution facilities
Power distribution cabinet, switch cabinet
AC distribution board, distribution box

DESCRIPTION

M120B series power supply system AC module are mainly applicable to power distribution system for class B protection, to protect electrical equipment from the impact of lightning electromagnetic pulse, induced over voltage, transient operation and resonance(<100μs) over voltage.

INSTALLATION INSTRUCTION



M120B4

TECHNICAL PARAMETER

Model	M120B	M120B2	M120B1+N	M120B4	M120B3+N
Electrical Parameter					
Lightning Protection Zone（LPZ）	1–2				
Class					
According to DIN VDE6075 Part6（Draft11.89）A1,A2	B				
According to IEC61643	II				
Nominal working voltage（Un）		220VAC		380VAC	
Max continuous operating voltage（Uc）	385VAC				
Nominal discharge current In（8/20 μ s）	60kA				
Max discharge current Imax（8/20 μ s）	120kA				
Protection level Up 20kA(8/20 μ s)	≤1500V				
Up (In) (8/20 μ s)	≤3000V				
Response time（Ta）	25ns				
Protection model	L–PE	L、N–PE	L–N, N–PE	L1、L2、L3、N–PE	L1、L2、L3–N，N–PE
Working conditions	Temperature: – 40 ~ + 85℃ Relative humidity:≤95%				
Standards compliance	IEC 61643、EN60950				
Mechanical characteristics					
Mounting	DIN rail mounting 35mm				
Status indicator	Operating &fail state indicator,Lightning counter				
Max connecting line diameter	35 mm²				
Recommend connecting line diameter	L、N Line ≥25mm² PE Line ≥35mm²				
Largest terminal installation torque	6–8N.m				
Dimension	90*36*65mm	90*72*65mm		90*144*65mm	
Material	PBTGF20Vo				
IP code（IEC EN 60529）	IP20				
Quantity of modules	1	2	2	4	4

B+C Power supply SPD

Class B+C ·100kA·220/380VAC

FEATURE

Remote alarm
No leakage current, low residual voltage
Large discharge current, fast response.
Standardized module design, easy to install simple for maintenance
Temperature control to protect circuit, thermal disconnect device

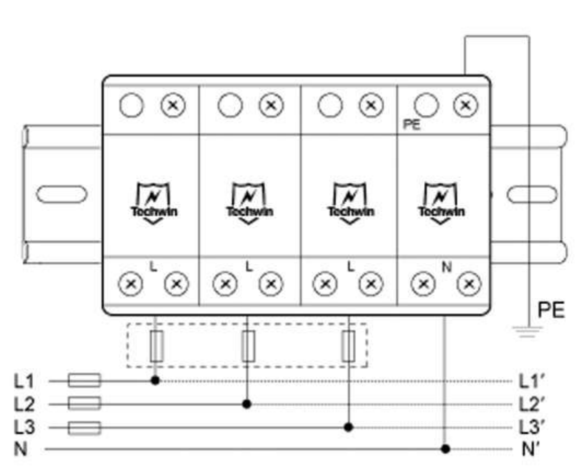
APPLICATION

Class B+C protection
Industrial electrical network
Civilian power grid
Automated machine room
Substation main control room.
Electrical distribution facilities
Power distribution cabinet, switch cabinet
AC distribution board, distribution box

DESCRIPTION

Class B+C series power supply system AC module are mainly applicable to power distribution system for class C protection, to protect electrical equipment from the impact of lightning electromagnetic pulse, induced over voltage, transient operation and resonance(<100μs) over voltage. Even if the high-energy transients in circuit, device also can get maximum protection.

INSTALLATION INSTRUCTION



M100B+C/4

TECHNICAL PARAMETER

Model	M100B+C/1+N	M100B+C/3+N
Electrical Parameter		
Lightning Protection Zone（LPZ）	0B-1	
Class		
According to DIN VDE6075 Part6（Draft11.89）A1,A2	A+B	
According to IEC61643	Ⅰ+Ⅱ	
Nominal working voltage（Un）	220VAC	380VAC
Max continuous operating voltage（Uc）	255VAC(L-N)	
Max discharge current limp（10/350μs）	25kA	
Max discharge current Imax（8/20μs）	100KA	
Protection level（10/350μs）	≤2500V@(8/20μS),≤1100V@(10/350μS)	
Response time（Ta）	25ns	
Protection model	L-N、N-PE	L1、L2、L3-N，N-PE
Working conditions	Temperature: -40~+85℃ Relative humidity:≤95%	
Standards compliance	IEC 61643、EN60950	
Mechanical characteristics		
Mounting	DIN rail mounting 35mm	
Max connecting line diameter	35 mm²	
Recommend connecting line diameter	L、N Line ≥25mm² PE Line ≥35mm²	
Largest terminal installation torque	6-8N.m	
Dimension	90*72*65mm	90*144*65mm
Material	PBTGF20Vo	
IP code（IEC EN 60529）	IP20	
Quantity of modules	2	4

MA25B Series Class I Power Supply SPD

Class A ·25kA·385VAC

FEATURES

Remote alarm
No leakage current, low residual voltage
Large discharge current, fast response.
Standardized module design, easy to install simple for maintenance
Temperature control to protect circuit, thermal disconnect device
10/350μs waveform

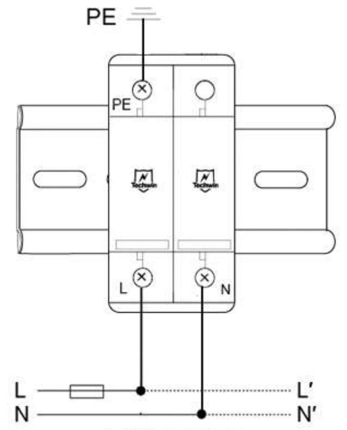
APPLICATION

Class I lightning protection
Industrial electrical network
Civilian power grid
Automated machine room
Substation main control room.
Electrical distribution facilities
Power distribution cabinet, switch cabinet
AC distribution board, distribution box

DESCRIPTION

MA25B series SPD are mainly applicable to distribution system for class I protection, to protect electrical equipment from the impact of lightning electromagnetic pulse, induced power voltage, transient operation and resonance(<100μs) over voltage.

INSTALLATION INSTRUCTION



MA25B2

TECHNICAL PARAMETER

Model	MA25B2	MA25B1+N	MA25B3	MA25B4	MA25B3+N
Electrical Parameter					
Lightning Protection Zone（LPZ）	0B–1				
Class					
According to DIN VDE6075 Part6（Draft11.89）A1,A2	A				
According to IEC61643	I				
Nominal working voltage（Un）	380VAC/Single phase 220VAC				
Max continuous operating voltage（Uc）	385VAC				
Max discharge current Imax（8/20μs）	100kA				
Max discharge current limp（10/350μs）	25kA				
Protection level （10/350μs）	≤1100V				
Response time（Ta）	100ns				
Protection model	L,N–PE	L–N,N–PE	L1、L2、L3–PE	L1、L2、L3、N–PE	L1、L2、L3–N，N–PE
Working conditions	Temperature: – 40 ~ + 85℃ Relative humidity:≤95%				
Standards compliance	IEC 61643、EN60950				
Mechanical characteristics					
Mounting	DIN rail mounting 35mm				
Max connecting line diameter	25 mm²				
Recommend connecting line diameter	L、N Line ≥16mm² PE Line≥25mm²				
Largest terminal installation torque	6–8N.m				
Dimension	90*36*65mm		90*54*65mm	90*72*65mm	
Material	PBTGF20Vo				
IP code（IEC EN 60529）	IP20				
Quantity of modules		2	3	4	

PDU with lightning protection device

Class D ·10kA·220/275VAC

FEATURE

Low residual voltage, fast response

Temperature–control to protect circuit, built–in thermal protection

Beautiful appearance and rigorous structure

International famous core component with excellent performance

APPLICATION

Machinery room:Device in computer room,device in monitor room,telephone room,fire–alarm system,PDU.

Office room:Computer, fax.

Family:TV, PC, telephone,network device, home theatre

DESCRIPTION

PDU with lightning protection device is mainly used at the end of AC power equipment for power protection. Not only can this series products meet the most basic requirement of power distribution and special power utilization, but also have the function of absorbing line surge of final stage RF, EMI in power system to extend the life of the equipment and reduce the cost of the long–term operation.

TECHNICAL PARAMETER

Model	MC10–220–3	MC10–220–4	MC10–220–5	MC10–220–6
Electrical Parameter				
Lightning Protection Zone（LPZ）	2–3			
Class				
According to DIN VDE6075 Part6（Draft11.89）A1,A2	D			
According to IEC61643	Ⅲ			
Nominal working voltage（Un）	220V			
Max continuous operating voltage（Uc）	275V			
Nominal discharge current In（8/20μs）	5kA			
Max discharge current Imax（8/20μs）	10kA			
operation voltage	430V			
Protection level Up(In)	≤900V			
Response time（Ta）	25ns			
Working conditions	Temperature:－40～＋85℃ Relative humidity:≤95%			
Standards compliance	IEC 61643、EN60950			
Mechanical characteristics				
Status indicator	Illuminated Switch			
Dimension	225X55X35mm	310X55X33mm	315X55X33mm	410X52X30mm
Material	PCVo			
IP code（IEC EN 60529）	IP20			
Protection model	L, N–PE			

PDU with lightning protection device

Class D ·10kA·220/275VAC

FEATURE

Low residual voltage,fast response
Temperature-control to protect circuit, built-in thermal protection
Beautiful appearance and rigorous structure.
International famous core component with excellent performance

APPLICATION

Machinery room:Device in computer room,device in monitor room,telephone room,fire-alarm system,PDU.
Office room:Computer,fax.
Family:TV,PC,telephone,network device,home theatre

DESCRIPTION

PDU with lightning protection device is mainly used at the end of AC power equipment for power protection. Not only can this series products meet the most basic requirement of power distribution and special power utilization, but also its' size meet 19-inch standard rack and non-standard cabinets actual installation requirements.

TECHNICAL PARAMETER

Model	PDU10-220-6	PDU10-220-8
Electrical Parameter		
Lightning Protection Zone（LPZ）	2-3	
Class		
According to DIN VDE6075 Part6（Draft11.89）A1,A2	D	
According to IEC61643	Ⅲ	
Nominal working voltage（Un）	220V	
Max continuous operating voltage（Uc）	275V	
Nominal discharge current In（8/20μs）	5KA	
Max discharge current Imax（8/20μs）	10KA	
Operation voltage	430V	
Protection level Up(In)	≤900V	
Response time（Ta）	25ns	
Working conditions	Temperature:－40～＋85℃　Relative humidity:≤95%	
Standards compliance	IEC 61643、EN60950	
Mechanical characteristics		
Mounting	Rack-mounted	
Status indicator	Working status	
Dimension	Standard 19 inch	
Material/surface treatment/color	Steel/Spraying plastics/Black	Aluminum/Spraying plastics /Black
IP code（IEC EN 60529）	IP20	
Protection model	L、N-PE	

DC power supply lightning protection box

Class C ·40kA·220/275VDC

FEATURES

Lower residual voltage, short response time
Beautiful appearance, rigorous structure
Newest arcing technology, avoid fire accident thoroughly
Remote alarm contact, easy to remote control
Lighting counter to record the numbers of lightning
Status indicators visually verify protection level
International famous core component with excellent performance
Temperature control protect circuit, thermal disconnect device

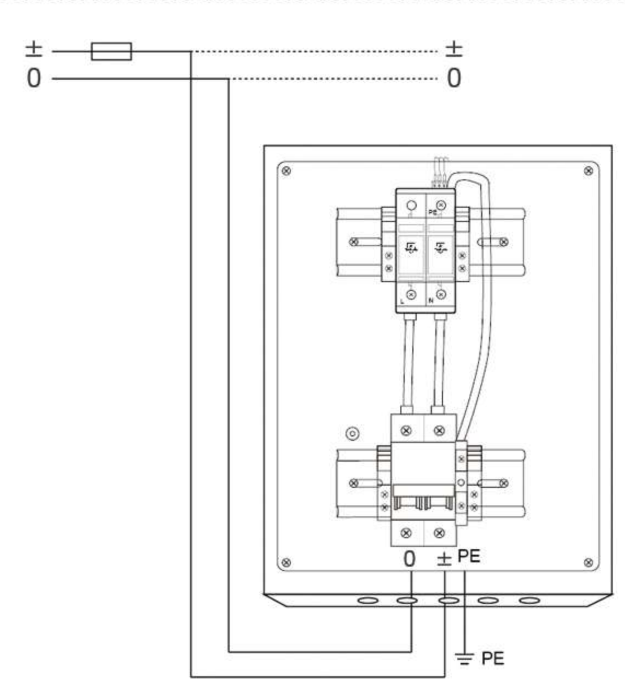
DESCRIPTION

Lightning protection box for DC power system (Series Type) are mainly applicable to power distribution system for class C protection, to protect electrical equipment from the impact of lightning electromagnetic pulse, induced over voltage, transient operation and resonance(<100μs) over voltage.

APPLICATION

DC power system
DC distribution board
DC power supply equipment
DC distribution
Electronic information system cabinet
Second-power supply equipment

INSTALLATION INSTRUCTION



B40-220

TECHNICAL PARAMETER

Model	B40-220	B40-48
Electrical Parameter		
Lightning Protection Zone (LPZ)	1-2	
Class		
According to DIN VDE6075 Part6 (Draft11.89) A1,A2	C	
According to IEC61643	II	
Nominal working voltage (Un)	220VDC	48VDC
Max continuous operating voltage (Uc)	275VDC	85VDC
Nominal discharge current In (8/20μs)	20kA	
Max discharge current Imax (8/20μs)	40kA	
Protection level Up(In)	1100V	300V
Response time (Ta)	25ns	
Protection model	+、- - PE	
Working conditions	Temperature: -40 ~ +85℃ Relative humidity:≤95%	
Standards compliance	IEC 61643、EN60950	
Mechanical characteristics		
Mounting	Wall-hung type / flat type	
Status indicator	Operating &fail state indicator,Lightning counter	
Max connecting line diameter	25 mm²	
Recommend connecting line diameter	L、N Line ≥10 mm² PE Line ≥16mm²	
Largest terminal installation torque	6-8N.m	
Dimension	310*230*110 mm	
Material/surface treatment/color	A3 steel/spraying plastics/white of computer	
IP code (IEC EN 60529)	IP55	
Quantity of modules	4	4

DC Module

Class C/D ·10kA·20-40kA·85-320VDC

FEATURE

Low residual voltage,fast response

Temperature–control to protect circuit, built–in thermal protection

Beautiful appearance and rigorous structure

International famous core component with excellent performance

DESCRIPTION

DC module is mainly applicable to power distribution system for class B protection, to protect electrical equipment from the impact of lightning electromagnetic pulse, induced over voltage, transient operation and resonance(<100μs) over voltage

APPLICATION

DC power system

DC distribution board

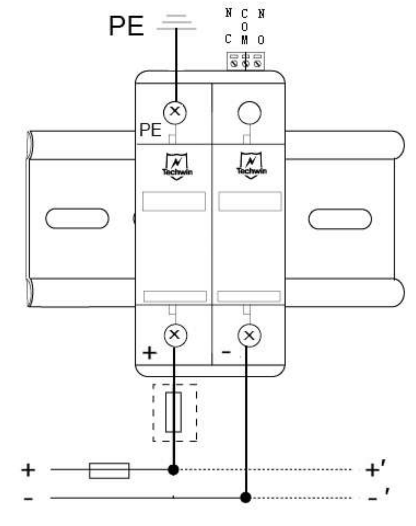
DC power supply equipment

DC distribution

Electronic information system cabinet

Second–power supply equipment

INSTALLATION INSTRUCTION



M40–48

TECHNICAL PARAMETER

Model	M10–24	M20–24	M20–48	M40–48	M40–220
Electrical Parameter					
Lightning Protection Zone（LPZ）	1–2				
Class					
According to DIN VDE6075 Part6（Draft11.89）A1,A2	C/D				
According to IEC61643	Ⅱ / Ⅲ				
Nominal working voltage（Un）	24VDC	24VDC	48VDC	48VDC	220VDC
Max continuous operating voltage（Uc）	30VDC	30VDC	85VDC	85VDC	320VDC
Nominal discharge current In（8/20μs）	5kA	10kA	10kA	20kA	20kA
Max discharge current Imax（8/20μs）	10kA	20kA	20kA	40kA	40kA
Protection level Up(In)	120V	150V	250V	300V	1300V
Response time（Ta）	25ns				
Protection model	+、– – PE				
Working conditions	Temperature: – 40 ~ + 85℃ Relative humidity:≤95%				
Standards compliance	IEC 61643、EN60950				
Mechanical characteristics					
Mounting	DIN rail mounting 35mm				
Max connecting line diameter	25mm²				
Recommend connecting line diameter(+、– Line/PE Line)	≥2.5/4mm²	≥4/6mm²	≥6/10mm²	≥10/16mm²	≥10/16mm²
Largest terminal installation torque	6–8N.m				
Dimension	90*36*65mm				
Material	PA66GF30Vo				
IP code（IEC EN 60529）	IP20				
Quantity of modules	2				

Audio protector

RJ11 connector crimp terminal ·5kA·180V

FEATURE

Multi. Protection circuits, Gas– Tube+ TVS technology
Dual protection in Common module and different module
Multi– Strike Capability

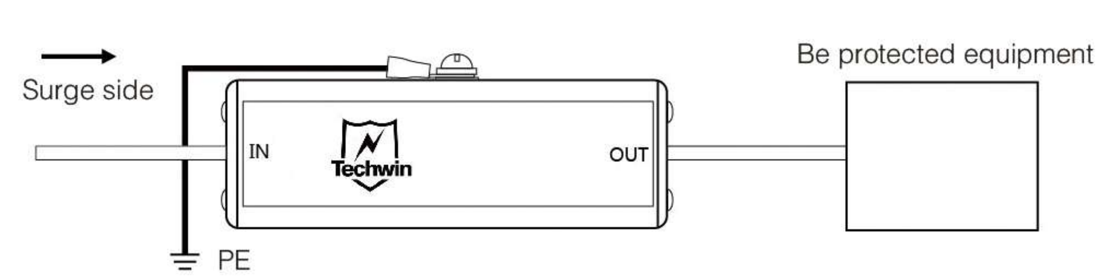
APPLICATION

Audio line protection
Multi. Protecton circuits.
Gas–Tube+TVS technology
Dual protection in Common module and different module
Multi– Strike Capability

DESCRIPTION

Audio protector series are mainly used in telephone, public broadcasting system to protect electrical and electronic equipment's signal line from the impact of lightning electromagnetic pulse, induced over voltage, transient operation and resonance over voltage.

INSTALLATION INSTRUCTION



180R2

TECHNICAL PARAMETER

Model	D180R2	D180R4	D180R2–16	D180Y2–10	D180Y2–A
Electrical Parameter					
Lightning Protection Zone（LPZ）	2				
Class					
According to DIN VDE6075 Part6（Draft11.89）A1,A2	D				
According to IEC61643	Ⅲ				
Max continuous operating voltage（Uc）	180VDC				
Nominal discharge current In（8/20μs）	3kA				
Max discharge current Imax（8/20μs）	5kA				
Limiting voltage(10/700μs)	≤250V				
Response time（Ta）	1ns				
Transmission rate	10Mbps				
Insertion loss	≤0.5dB				
Protection line	2,3/4,5	2/3,4/5	2,3/4,5	2 Line	2 Line
Protection port	1	2	16	10	1
Working conditions	Temperature: – 40 ~ + 85℃ Relative humidity: ≤95%				
Standards compliance	IEC 61000、EN60950、GB/T18802.21–2002、TB/T2311–2002				
Mechanical characteristics					
Mounting	Be Installed between protected equipment and signal line				
Interface form	RJ11	RJ11	RJ11	Inserting type	clamped type
Max connecting line diameter					1.5mm^2
Recommend connecting line diameter					1mm^2
Largest terminal installation torque	0.6–0.8N.m				
Dimension	85*25*25mm		480*86*42mm	96*43*70mm	90*14*65mm
Material/color	Aluminum/Blue				
IP code（IEC EN 60529）	IP20				

Data line protector

RJ45 connector crimp terminal·5kA·5V

FEATURE

Multi. Protection circuits, Gas– Tube+ TVS technology
Low insertion loss and fast response
Accurate limiting voltage
Low limiting voltage
large discharge current capacity

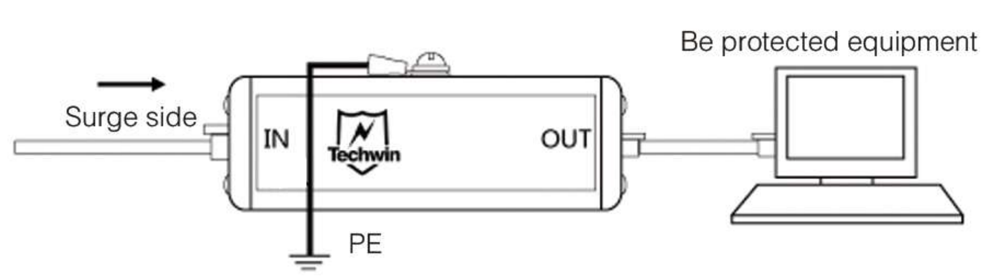
DESCRIPTION

Data line protector series are mainly used in TCP/IP communication network to protect electrical and electronic equipment's signal line from the impact of lightning electromagnetic pulse, induced over voltage, transient operation and resonance over voltage.

APPLICATION

Network switch
100/1000Mbps SWITCH、HUB、ROUTER network equipment
Communications line protection of security, power,
Transportation, industrial control, aerospace machine room

INSTALLATION INSTRUCTION



D05J4

TECHNICAL PARAMETER

Model	D05J4	D05J4-8	D05J4-16	D05J4-24	D05J8H
Electrical Parameter					
Lightning Protection Zone（LPZ）			2		
Class					
According to DIN VDE6075 Part6（Draft11.89）A1,A2			D		
According to IEC61643			Ⅲ		
Max continuous operating voltage（Uc）			5V		
Nominal discharge current In（8/20μs）			3KA		
Max discharge current Imax（8/20μs）			5KA		
Limiting voltage（10/700μs）			≤20V		
Response time（Ta）			1ns		
Transmission rate			100Mbps		1000Mbps
Error rate			$\leq 10^{-12}$		
Protection line			1/2,3/6		1/2,3/6,4/5,7/8
Protection port	1	8	16	24	1
Working conditions			Temperature: – 40 ~ +85℃ Relative humidity:≤95%		
Standards compliance			IEC 61000、EN60950、GB/T18802.21–2002、TB/T2311–2002		
Mechanical characteristics					
Mounting			Be Installed between protected equipment and signal line		
Interface form			RJ45		
Dimension	85*25*25mm	190*85*48mm	482*86*44mm		83*25*25mm
Material/color	One port、4 Ports Aluminum/Blue			8、16、24口 A3/black	
IP code（IEC EN 60529）			IP20		

Power over ethernet protector (gigabit)

RJ45 connector ·5kA·48V

FEATURES

Patented product
Graceful in appearance, rigorous in structure
Less insert loss, fast response
Low residual voltage
Coarse and fine full protection
PCB board adopts the design of micro– strip, good isolation, low line interference

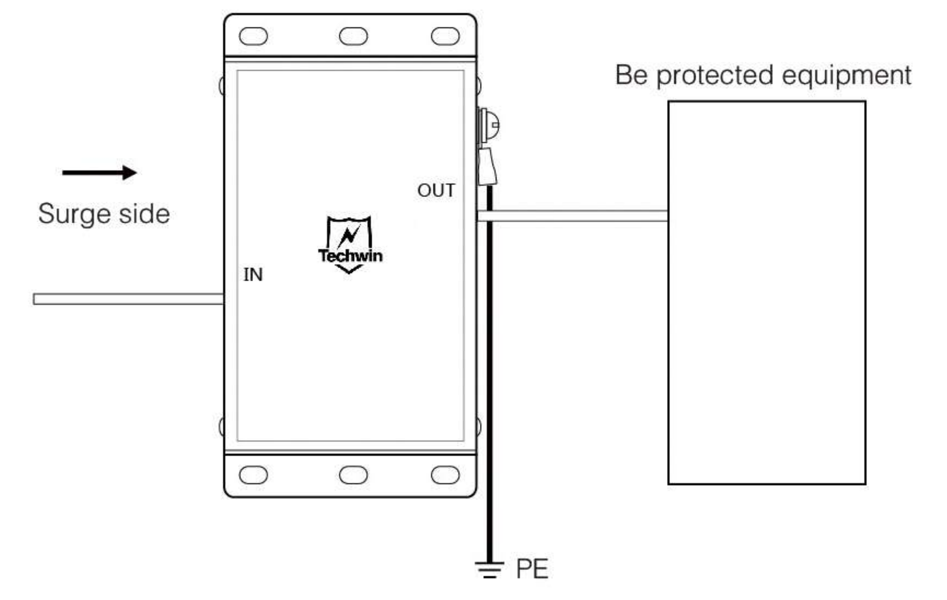
DESCRIPTION

Power Over Ethernet Protector is designed for POE power supply equipment, are widely used in the areas of wireless coverage, security monitoring etc, to protect the communication equipment's POE port line from the impact of Lightning Electromagnetic pulse, Lightning Electromagnetic pulse, switching over–voltage.

APPLICATION

Network terminal of POE circuit, telephone, network monitoring equipment

INSTALLATION INSTRUCTION



POE6–48

TECHNICAL PARAMETER

Model	POE6–48	POE6–48–4	POE6–48–8	POE6–48–24
Electrical Parameter				
Lightning Protection Zone（LPZ）	2			
Class				
According to DIN VDE6075 Part6（Draft11.89）A1,A2	D			
According to IEC61643	Ⅲ			
Nominal working voltage（Un）	48VDC			
Max continuous operating voltage（Uc）	57VDC			
Nominal discharge current In（8/20μs）	3kA			
Max discharge current Imax（8/20μs）	5kA			
Limiting voltage（10/700μs）	≤150V			
Response time（Ta）	1ns			
Transmission rate	1000Mbps			
Error rate	$\leq 10^{-12}$			
Protection line	1/2, 3/6 , 4/5, 7/8			
Working conditions	Temperature: –40～+85℃ Relative humidity:≤95%			
Interface form	RJ45			
Standards compliance	IEC 61000、EN60950、GB/T18802.21–2002、TB/T2311–2002			
Mechanical characteristics				
Mounting	Be Installed between protected equipment and signal line			
Dimension	104*58*28mm	95*85*48mm	190*85*48mm	482*86*44mm
Material/color	Aluminum/Blue			
IP code（IEC EN 60529）	IP20			

POE injector/ splitter with lightning protection

RJ45/connector·5kA·48V

FEATURES

FeatuPatented product
Graceful in appearance, rigorous in structure
Less insert loss, fast response
Low residual voltage
Coarse and fine full protection
PCB board adopts the design of micro- strip, good isolation, low line interferenceres

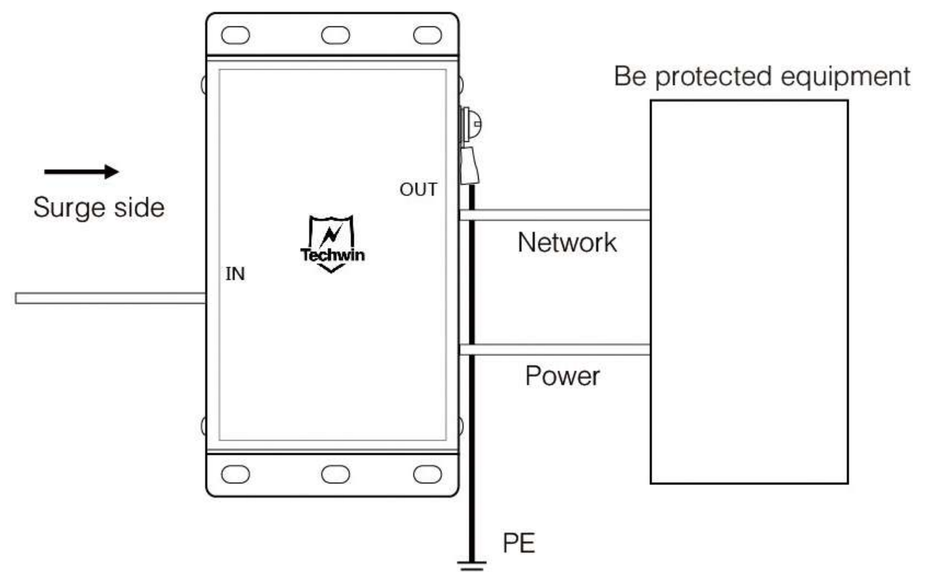
DESCRIPTION

POE splitter with lightning protection is a kind of surge protective device, designed for preceding stage POE equipment, which is separated to be backward stage power supply and network signal transmission respectively. POE injector with lightning protection is a kind of surge protective device, designed for POE equipment,which is used to combine preceding stage power supply and network signal to one line at the backward stage.

APPLICATION

Wireless coverage
Monitoring system

INSTALLATION INSTRUCTION



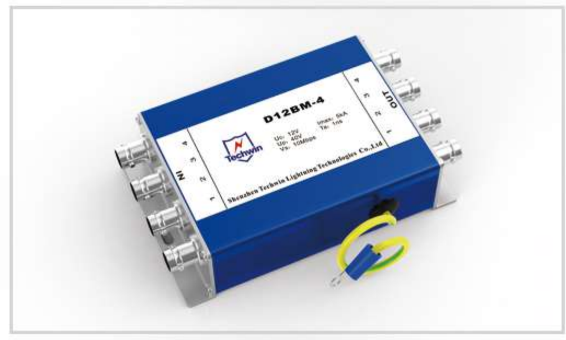
POE6-48-F

TECHNICAL PARAMETER

Model	POE6-48-H	POE6-48-F
Electrical Parameter		
Lightning Protection Zone（LPZ）	2	
Class		
According to DIN VDE6075 Part6（Draft11.89）A1,A2	D	
According to IEC61643	Ⅲ	
Max continuous operating voltage（Uc）	5V	
Nominal discharge current In（8/20μs）	3kA	
Max discharge current Imax（8/20μs）	5kA	
Limiting voltage(10/700μs)component wire-component wire	≤20V	
Response time（Ta）	1ns	
Transmission rate Vs	1000Mbps	
Error rate	≤10^{-12}	
Operating Temperature Range（TU）	Temperature:－40～＋85℃ Relative humidity:≤95%	
Interface form	RJ45	
Standards compliance	IEC 61000、EN60950	
Power part		
Nominal working voltage（Un）	48V	
Max continuous operating voltage（Uc）	57V	
Nominal discharge current In（8/20μs）	5kA	
Max discharge current Imax（8/20μs）	10kA	
Load current	0.5A	
Protection level Up（In）	150V	
Response time（Ta）	1ns	
Working conditions	Temperature:－40～＋85℃ Relative humidity:≤95%	
Interface form	clamped type	
Standards compliance	IEC 61643-1、EN60950、GB/T18802.21-2002、TB/T2311-2002、YD/T 1235.2	
Mechanical characteristics		
Mounting	Be Installed between protected equipment and signal line	
Dimension	105*68*28mm	
Material/color	Aluminum/Blue	
IP code（IEC EN 60529）	IP20	

Video signal protector

BNC connector ·5kA·12V-24V



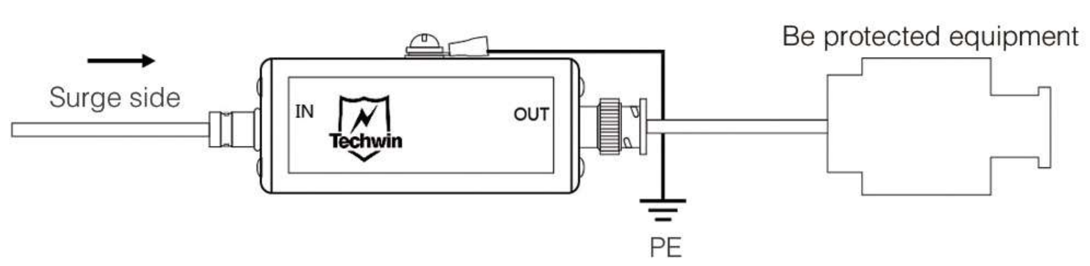
DESCRIPTION

Multi. Protection circuits, Gas– Tube+ TVS technology
Dual protection in Common module and different modul
TVS aray technology, low capacitance
Multi–Strike Capability

APPLICATION

Monitor device
Video Camera
E1, PDH, SHH SPDH
Digital hard disk video cassette rcorder (DVR)
Industrial control

INSTALLATION INSTRUCTION



D12BM

DESCRIPTION

Video signal protector is designed for analog video/digital camera to protect electrical and electronic equipment's signal line from the impact of lightning electromagnetic pulse, induced over voltage, transient operation and resonance over voltage.

TECHNICAL PARAMETER

Model	D12BM	D12BM–A	D12BM–4	D12BM–8	D24BM–16
Electrical Parameter					
Lightning Protection Zone（LPZ）	2				
Class					
According to DIN VDE6075 Part6（Draft11.89）A1,A2	D				
According to IEC61643	Ⅲ				
Max continuous operating voltage（Uc）	12V				24V
Nominal discharge current In（8/20μs）	3kA				
Max discharge current Imax（8/20μs）	5kA				
Limiting voltage（10/700μs）	40V				100V
Response time（Ta）	1ns				
Transmission rate	100Mbps				
Insertion loss	≤0.5dB				
Protection line	component wire–Enclosure、Enclosure–grounding				
Protection port	1	1	4	8	16
Working conditions	Temperature: –40～+85℃ Relative humidity:≤95%				
Standards compliance	IEC 61000、EN60950				
Mechanical characteristics					
Mounting	Be Installed between protected equipment and signal line				
Interface form	BNC connector				
Dimension	83*25*25mm	77*68*25mm	110*74*29mm	170*128*43mm	482*95*45mm
Material/color	Aluminum/Blue			A3 Steel/Black	
IP code（IEC EN 60529）	IP20				

Control line protector

Clamped type·5kA·5V-36V

FEATURE

Low insertion loss, fast response
low limiting voltage
International famous core component with excellent performance.
Precise limiting voltage
Large discharge current

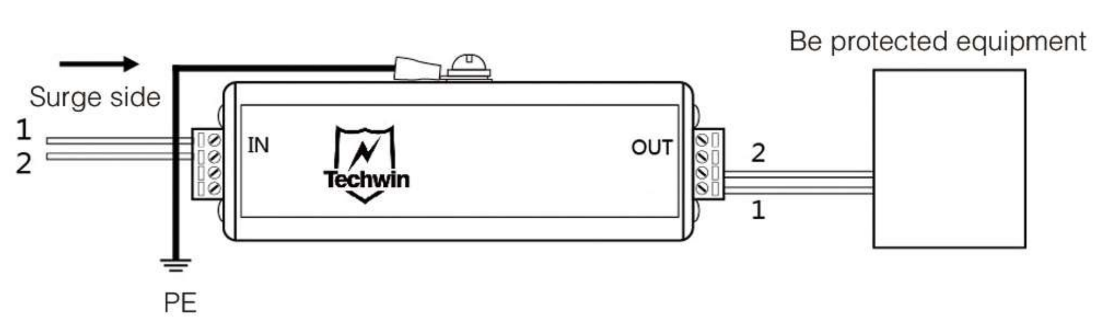
DESCRIPTION

Control line protector is designed for control line system to protect electrical and electronic equipment's signal line from the impact of lightning electromagnetic pulse, induced over voltage, transient operation and resonance over voltage.

APPLICATION

V.1, X.27, RS485, RS422
LAN, CAN, V.24/RS232–C,MODEM BUS
TOKEN–RING, INDUSTRIAL BUS
Suitable for the signal's transmission rate protection under the same voltage and sme specifications

INSTALLATION INSTRUCTION



D12Y2

TECHNICAL PARAMETER

Model	D05Y2(–A)	D05Y4	D12Y2(–A)	D12Y4	D24Y4	D36Y2(–A)
Electrical Parameter						
Lightning Protection Zone（LPZ）	2					
Class						
According to DIN VDE6075 Part6（Draft11.89）A1,A2	D					
According to IEC61643	Ⅲ					
Max continuous operating voltage（Uc）	5V		12V		24V	36V
Nominal discharge current In（8/20μs）	3kA					
Max discharge current Imax（8/20μs）	5kA					
Limiting voltage（10/700μs）	20V		40V		100V	120V
Response time（Ta）	1ns					
Transmission rate	10Mbps					
Insertion loss	≤0.5dB					
Protection line	2	4	2	4	4	2
Working conditions	Temperature: –40～+85℃ Relative humidity:≤95%					
Standards compliance	IEC 616000、EN60950					
Mechanical characteristics						
Mounting	Be Installed between protected equipment and signal line					
Interface form	Compression plug					
Max connecting line diameter	1.5mm²					
Recommend connecting line diameter	1mm²					
Largest terminal installation torque	0.6–0.8N.m					
Dimension	Regular type:85*25*25mm DIN rail type:90*14*65mm					
Material/color	Aluminum/Blue					
IP code（IEC EN 60529）	IP20					

Explosion-proof signal lightning protector

Clamped type·10kA·48V

FEATURE

Large discharge current
Less insertion loss
fast response
Stable performance
Reliable explosion-proof

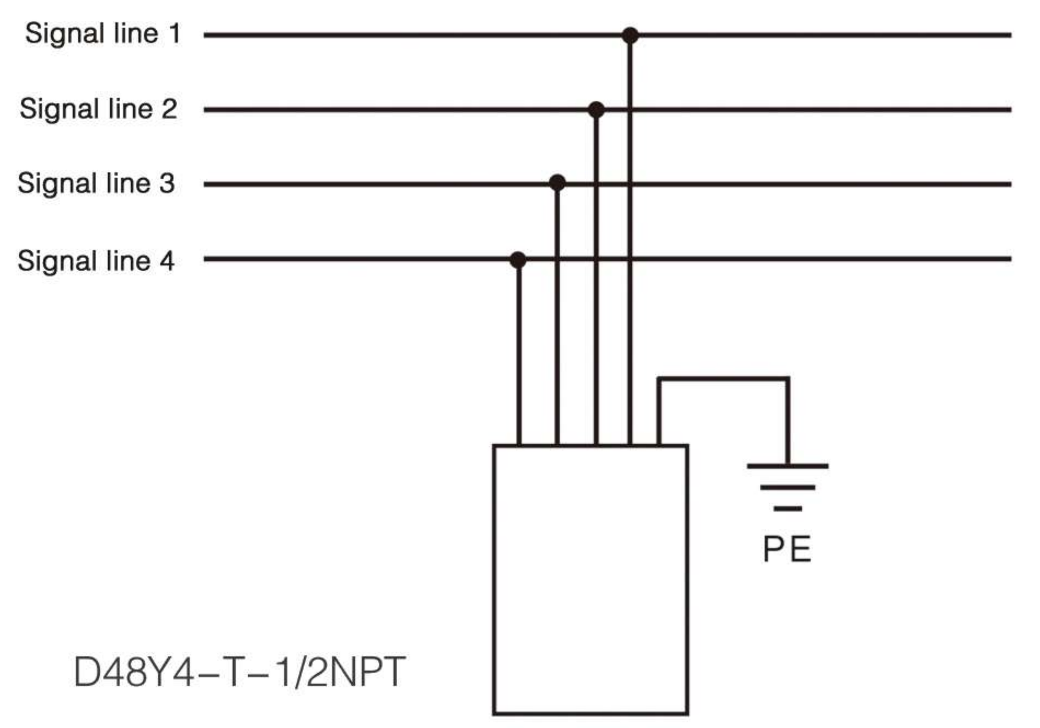
APPLICATION

FF bus
World FIP system, petrifaction mine and gas
HART agreement,4-20mA analog signal

DESCRIPTION

Explosion-proof signal lightning protector is designed for protecting instrument of 2 line,3 line, 4 line, from the impact of lightning electromagnetic pulse, induced over voltage, transient operation and resonance over voltage. Lightning protective devices are encapsulated in 316 stainless steel casing, can provide into line interface of thread model, such as 1/2NPT、 M20*1.5、 PG13.5、 G1/2 etc.

INSTALLATION INSTRUCTION



TECHNICAL PARAMETER

Model	D48Y2-T-1/2NPT	D48Y3-T-1/2NPT	D48Y4-T-1/2NPT
Electrical Parameter			
Lightning Protection Zone（LPZ）	2		
Class			
According to DIN VDE	D		
According to IEC61643	III		
Max continuous operating voltage（Uc）	48VDC		
Nominal discharge current In（8/20μS）	5kA		
Max discharge current Imax（8/20μS）	10kA		
Limiting voltage（10/700μS） component wire-grounding	≤300V		
Protection line	2 Line	3 Line	4 Line
Response time	25ns		
Transmission rate	10Mbps		
Insertion loss	≤0.5dB		
Compression plug	≥250mm		
Working conditions	Temperature:-40～+85℃ Relative humidity:≤95%(25℃)		
Standards compliance	IEC 61000、EN60950		
Mechanical characteristics			
Mounting	Be Installed between protected equipment and signal line		
Dimension（Not including line）	75*30*27 mm		
Material/color	Steel/Natural color		
IP code（IEC EN 60529）	IP54		
Ex-mark	Exd II CT6Gb		

RS232 protector

DB connector·5kA·12V-24V

FEATURE

Multi. Protection circuits, Gas-Tube+ TVS technology
Dual protection in Common module and different module
TVS array technology, low capacitance
Multi-Strike Capability

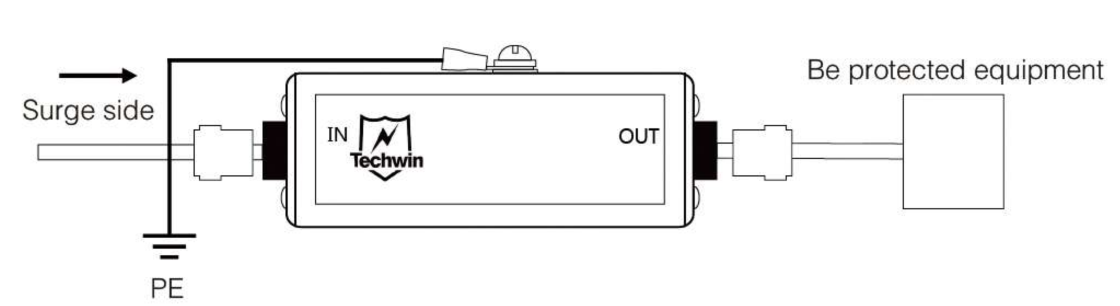
APPLICATION

Network computer room server or other DB connector equipment
Telecommunication, CCTV, networking system.
RS232 serial device, DB15 display interface device,
DB25 printer interface device, etc.

DESCRIPTION

Series Signal protector designed for communication network line not to be spoiled by lightning over-voltage, induced over-voltage and static discharge. This series product have connector with 9 needles, 15needles, 25needles, are widely used in communication security, network to protect data line, control line.

INSTALLATION INSTRUCTION



D12DB9-3

TECHNICAL PARAMETER

Model	D12DB9-3	D12DB9-9	D24DB15-15
Electrical Parameter			
Lightning Protection Zone (LPZ)	2		
Class			
According to DIN VDE6075 Part6 (Draft11.89) A1,A2	D		
According to IEC61643	Ⅲ		
Max continuous operating voltage (Uc)	12V		24V
Nominal discharge current In (8/20μs)	3KA		
Max discharge current Imax (8/20μs)	5KA		
Limiting voltage (10/700μs)	≤40V		≤100V
Response time (Ta)	1ns		
Transmission rate	10Mbps		
Insertion loss	≤0.5dB		
Protection line	2, 3, 5	1-9	1-15
Protection port	3Needles	9Needles	15Needles
Working conditions	Temperature: −40 ~ +85℃,Relative humidity:≤95%		
Standards compliance	IEC 61000、EN60950		
Mechanical characteristics			
Mounting	Be Installed between protected equipment and signal line		
Interface form	DB9-J/K		DB15
Dimension	85*25*25mm	102*55*25mm	102*55*25mm
Material/color	Aluminum/Blue		
IP code (IEC EN 60529)	IP20		

2 in 1 monitoring system SPD(Power and network line)

RJ45/connector ·5kA·5V

FEATURE

Multi. protection circuits,Gas –Tube +TVS technology
Dual protection in common module and different module
2 in 1 protection
TVS array technology, low capacitance
Multi–Strike capability
Easy to install and rigorous in structure.

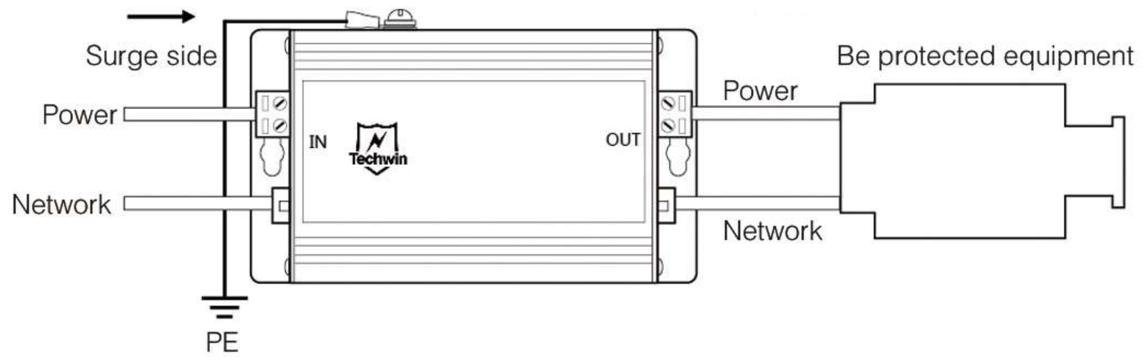
DESCRIPTION

2in 1 monitor lighting arrester（power and network）, a kind of SPD, designed for digital camera to protect camera power, data line from lightning electromagnetic pulse, induced over–voltage, operating over–voltage.

APPLICATION

Designed to protect monitor equipment
widely applied in bank monitor &safeguard system.
Monitor equipment for school,enterprise,road etc.security and protection.

INSTALLATION INSTRUCTION



M10–220/D05J4

TECHNICAL PARAMETER

Model	M10–24/D05J4	M10–12/D05J4	M10–220/D05J4
Electrical parameter network			
Lightning Protection Zone（LPZ）	2		
Class			
According to DIN VDE6075 Part6（Draft11.89）A1,A2	D		
According to IEC61643	Ⅲ		
Max continuous operating voltage（Uc）	5V		
Nominal discharge current In（8/20μs）	3kA		
Max discharge current Imax（8/20μs）	5kA		
Limiting voltage（10/700μs）component wire–component wire	≤20V		
Response time（Ta）	1ns		
Transmission rate Vs	100Mbps		
Insertion loss	≤0.5dB		
Operating temperature range（TU）	Temperature:－40～＋85℃ Relative humidity:≤95%		
Interface form	RJ45		
Standards compliance	IEC 61000、EN60950		

Electrical parameters of power supply	24V	12V	220V
Nominal working voltage（Un）	30V	15V	275V
Max continuous operating voltage（Uc）	5kA		
Nominal discharge current In（8/20μs）	10kA		
Max discharge current Imax（8/20μs）	0.5A		
Load current	≤100V	≤60V	≤900V
Protection level Up（In）	1ns		
Response time（Ta）	Temperature:－40～＋85℃ Relative humidity:≤95%		
Working conditions	Clamped type		
Interface form			
Standards compliance	IEC 61643–1、EN60950、GB/T18802.21–2002、TB/T2311–2002、YD/T 1235.2		
Mechanical characteristics			
Mounting	Be Installed between protected equipment and signal line		
Dimension	112*60*25mm		
Material/color	Aluminum/Blue		
IP code（IEC EN 60529）	IP20		

2 in 1 monitoring system SPD(Power and video line)

BNC/connector ·5kA·12V

FEATURE

Multi. protection circuits,Gas –Tube +TVS technology
Dual protection in common module and different module
2 in 1 protection
TVS array technology, low capacitance
Multi–Strike capability
Easy to install and rigorous in structure.

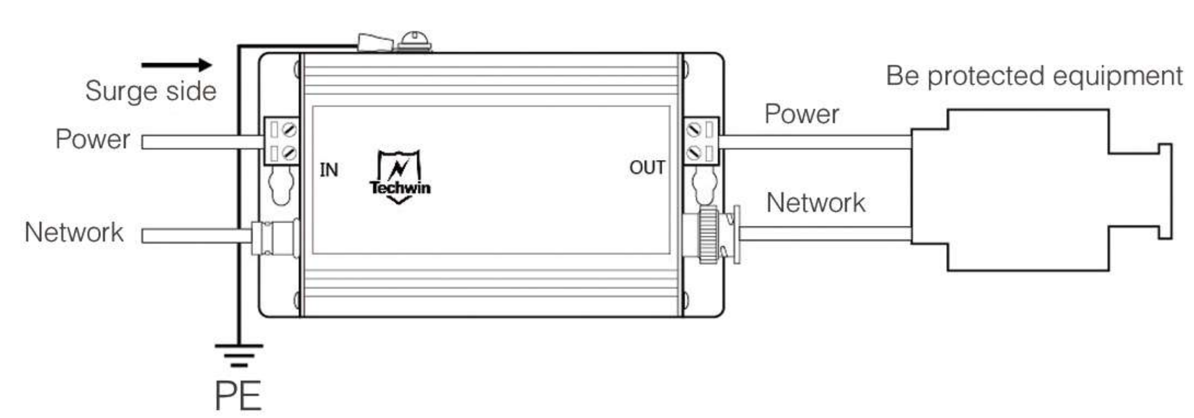
DESCRIPTION

2in 1 monitor lighting arrester（power and video line）, a kind of SPD, designed for analog video/digital camera to protect camera power, video line from lightning electromagnetic pulse, induced over–voltage, operating over–voltage.

APPLICATION

Designed to protect infrared camera
widely applied in bank monitor &safeguard system.
Monitor equipment for school,enterprise,road etc.security and protection.

INSTALLATION INSTRUCTION



M10–220/D12BM

TECHNICAL PARAMETER

Model	M10–12/D12BM	M10–24/D12BM	M10–220/D12BM
Video partial electrical parameters			
Lightning Protection Zone（LPZ）		2	
Class			
According to DIN VDE6075 Part6（Draft11.89）A1,A2		D	
According to IEC61643		Ⅲ	
Max continuous operating voltage（Uc）		12V	
Nominal discharge current In（8/20μs）		3kA	
Max discharge current Imax（8/20μs）		5kA	
Limiting voltage（10/700μs）component wire–Enclosure		40V	
Response time（Ta）		1ns	
Transmission rate		100Mbps	
Insertion loss		≤0.5dB	
Working conditions		Temperature: –40～+85℃ Relative humidity:≤95%	
Interface form		BNC	
Standards compliance		IEC 61000、EN60950	
Electrical parameters of power supply			
Nominal working voltage（Un）	12V	24V	220V
Max continuous operating voltage（Uc）	15V	30V	275V
Nominal discharge current In（8/20μs）		5kA	
Max discharge current Imax（8/20μs）		10kA	
Load current		0.5A	
Protection level Up（In）	60V	100V	900V
Response time(Ta)		1ns	
Working conditions		Temperature: –40～+85℃ Relative humidity:95%	
Interface form		Clamped type	
Standards compliance		IEC 61643–1、EN60950、GB/T18802.21–2002、TB/T2311–2002、YD/T 1235.2	
Mechanical characteristics			
Mounting		Be Installed between protected equipment and signal line	
Material/color		Aluminum/Blue	
Dimension		112*60*25mm	
IP code（IEC EN 60529）		IP20	

2 in 1 monitoring system SPD(Power and control line)

Clamped type ·5kA·12V-24V-220V

FEATURE

Multi. protection circuits,Gas –Tube +TVS technology
Dual protection in common module and different module
3 in 1 protection
TVS array technology, low capacitance
Multi–Strike capability
Easy to install and rigorous in structure

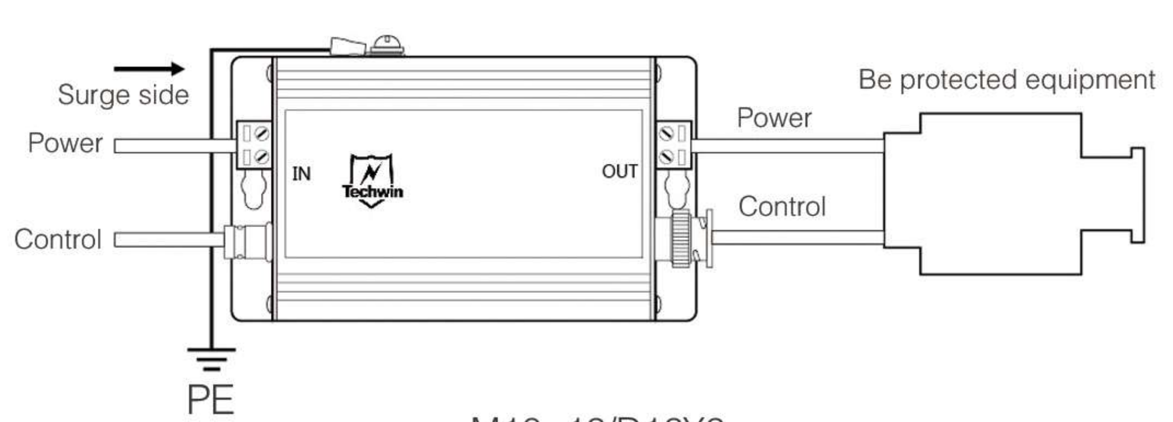
APPLICATION

Designed to protect monitor equipment (power,Date control), widely applied in bank monitor &safeguard system. Monitor equipment for school,enterprise,road etc.security and protection.

DESCRIPTION

2in 1 monitor lighting arrester（power and control line）, a kind of SPD, designed for analog video/digital camera to protect camera power, control line from lightning electromagnetic pulse, induced over–voltage, operating over–voltage.

INSTALLATION INSTRUCTION



M10–12/D12Y2

TECHNICAL PARAMETER

Model	M10–12/D12Y2	M10–24/D12Y2	M10–220/D12Y2
Control part of electrical parameters			
Lightning Protection Zone（LPZ）	2		
Class			
According to DIN VDE6075 Part6（Draft11.89）A1,A2	D		
According to IEC61643	Ⅲ		
Max continuous operating voltage（Uc）	12V		
Nominal discharge current In（8/20μs）	3kA		
Max discharge current Imax（8/20μs）	5kA		
Limiting voltage（10/700μs）component wire–component wire	≤40V		
Response time（Ta）	1ns		
Transmission rate	10Mbps		
Insertion loss	≤0.5dB		
Interface form	Clamped type		
Working conditions	Temperature: – 40～ + 85℃ Relative humidity:≤95%		
Standards compliance	IEC 61643–1、EN60950、GB/T18802.21–2002、TB/T2311–2002、YD/T 1235.1 、YD/T 1235.2、YD/T 1542		
Electrical parameters of power supply			
Nominal working voltage（Un）	12VDC	24VAC	220VAC
Max continuous operating voltage(Uc)	15VDC	30VAC	275VAC
Nominal discharge current In（8/20μs）	5KA		
Max discharge current Imax（8/20μs）	10KA		
Protection level Up（In）	60V	100V	900V
Response time（Ta）	1ns		
Working conditions	Temperature: – 40～ + 85℃ Relative humidity:≤95%		
Interface form	Clamped type		
Mechanical characteristics			
Mounting	Be Installed between protected equipment and signal line		
Dimension	112*60*25mm		
Material/color	Aluminum/Blue		
IP code（IEC EN 60529）	IP20		
Order information			
Item No	95013	95017	95021

3 in 1 monitor lightning arrester

BNC/connector ·5kA·12V

FEATURE

Multi. protection circuits,Gas –Tube +TVS technology
Dual protection in common module and different module
3 in 1 protection
TVS array technology, low capacitance
Multi–Strike capability

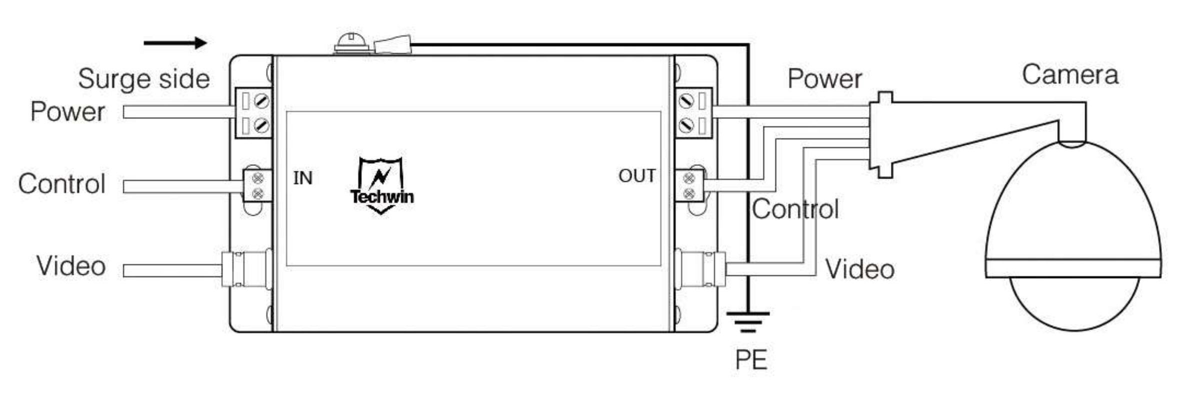
DESCRIPTION

3 in 1 monitor lighting arrester, a kind of SPD, designed for analog video camera to protect camera power, video, control line from lightning electromagnetic pulse, induced over–voltage, operating over–voltage.

APPLICATION

Designed to protect monitor equipment (power,Data control,Video), widely applied in bank monitor &safeguard system.
Monitor equipment for school,enterprise,road etc.security and protection.

INSTALLATION INSTRUCTION



M10–24/D12BM/D12Y2

TECHNICAL PARAMETER

Model	M10–12/D12BM/D12Y2	M10–24/D12BM/D12Y2	M10–220/D12BM/D12Y2
Video / control part of electrical parameters			
Lightning Protection Zone（LPZ）	2		
Class			
According to DIN VDE6075 Part6（Draft11.89）A1,A2	D		
According to IEC61643	Ⅲ		
Max continuous operating voltage（Uc）	12V		
Nominal discharge current In（8/20μs）	3kA		
Max discharge current Imax（8/20μs）	5kA		
Limiting voltage（10/700μs）component wire–Enclosure	≤40V		
Response time（Ta）	1ns		
Transmission rate	Video:100Mbps Clamped type:10Mbps		
Insertion loss	≤0.5dB		
Working conditions	Temperature:－40～＋85℃ Relative humidity:≤95%		
Interface form	Video:BNC Control:Clamped type		
Standards compliance	IEC 61000、EN60950		
Electrical parameters of power supply			
Nominal working voltage（Un）	12VDC	24VAC	220VAC
Max continuous operating voltage（Uc）	15VDC	30VAC	275VAC
Nominal discharge current In（8/20μs）	5kA		
Max discharge current Imax（8/20μs）	10kA		
Load current	0.5A		
Protection level Up（In）	60V	100V	900V
Response time（Ta）	1ns		
Working conditions	Temperature:－40～＋85℃ Relative humidity:≤95%		
Interface form	Clamped type		
Standards compliance	IEC 61643–1、EN60950、GB/T18802.21–2002、TB/T2311–2002、YD/T 1235.2		
Mechanical characteristics			
Mounting	Be Installed between protected equipment and signal line		
Dimension	122*80*30mm		
Material/color	Aluminum/Blue		
IP code（IEC EN 60529）	IP20		

Surge Protector for HD SDI Camera

BNC/connector ·5kA·12V

FEATURE

Low insertion loss, fast response time, and low limiting voltage
Precise limiting voltage, large discharge current
High transmission rate, low bit error rate
PCB designed with micro-strip, high isolation and slight line disturbance

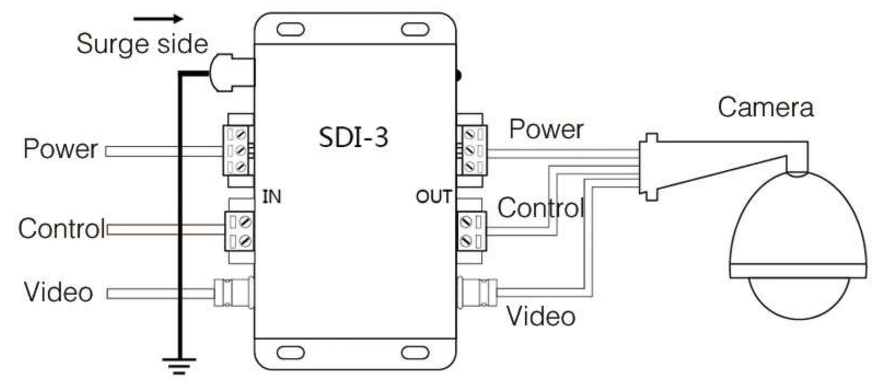
DESCRIPTION

SDI surge arrester is designed for HD SDI camera with PTZ control, protecting video(power, PTZ control, etc) line from lightning electromagnetic pulse, induced over voltage, and operating over voltage.

APPLICATION

HD SDI survelliance system
Video transmission equipment
DVR & video cutter of integrated control cabinet

INSTALLATION INSTRUCTION



SDI-3

TECHNICAL PARAMETER

Model	SDI-1	SDI-2	SDI-3
Video / control part of electrical parameters			
Lightning Protection Zone（LPZ）		2	
Class			
According to DIN VDE6075 Part6（Draft11.89）A1,A2		D	
According to IEC61643		Ⅲ	
Max continuous operating voltage（Uc）		12V	
Nominal discharge current In（8/20μs）		3kA	
Max discharge current Imax（8/20μs）		5kA	
Limiting voltage （10/700μs）component wire–component wire		40V	
Response time（Ta）		1ns	
Transmission rate（Vs）		Control:10Mbps Video:1.485Gbps/3Gbps	
Error rate		$<10^{-12}$	
Working conditions（TU）		Temperature:－40～＋85℃ Relative humidity:≤95%	
Interface form		BNC(J、KAccording to the actual needs of the configuration) ;Video:BNC;PTZ control:Clamped type	
Standards compliance		IEC 61000、EN60950	
Electrical parameters of power supply			
Nominal working voltage（Un）		12VDC/24VAC/220VAC	
Nominal discharge current In（8/20μs）		5kA	
Max discharge current Imax（8/20μs）		10kA	
Protection level Up（In）	≤60V	≤100V	≤900V
Working conditions		Temperature:－40～＋85℃ Relative humidity:≤95%	
Interface form		Clamped type	
Standards compliance		IEC 61643-1、EN60950、GB/T18802.21-2002、TB/T2311-2002、YD/T 1235.2	
Mechanical characteristics			
Mounting		Be Installed between protected equipment and signal line	
Dimension	90×25×25mm		118*90*45mm
Material/color		Aluminum/Blue	
IP code（IEC EN 60529）		IP20	

3 in 1 Networking monitoring Surge Protector

RJ45/connector ·5kA·5/12V

FEATURES

Comprehensive protection for power, control & video signal of camera with little disturbance

Large discharge current and low residual voltage

Multi–tier protection

Low insertion loss, perfect transmission performance and without leakage current

DESCRIPTION

3 in 1 monitoring surge protector is designed for IP camera with PTZ control and other control equipment, protecting power, network & control line from lightning electromagnetic pulse, induced over voltage, and operating over voltage.

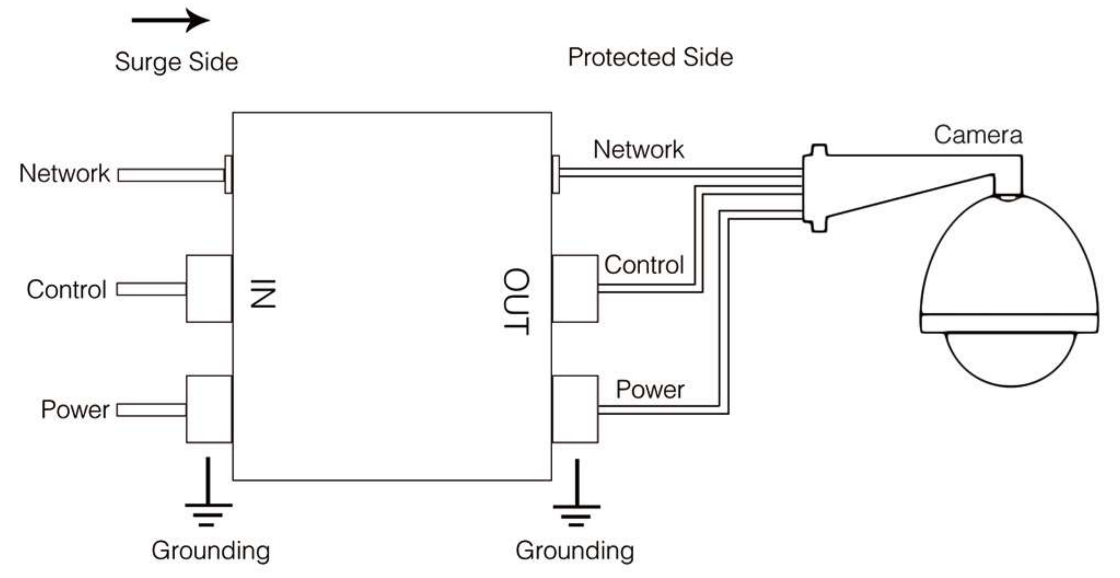
APPLICATION

Monitor equipment(power, PTZ, camera) of surveillance system

Bank monitoring system

Security system of school, enterprise and road.

INSTALLATION INSTRUCTION



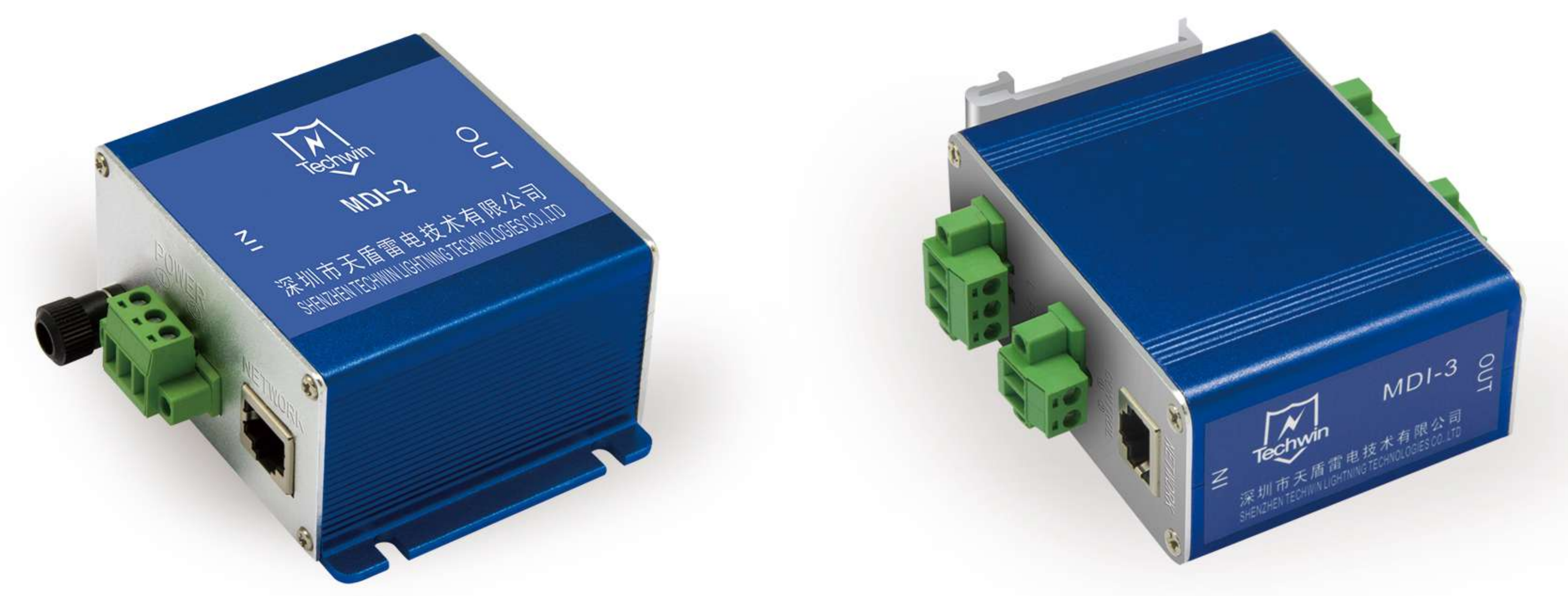
M10–220/D05J4/D12Y2

TECHNICAL PARAMETER

Model	M10–220/D05J4/D12Y2	M10–220/D05J4/D12Y6
Network / control part of electrical parameters		
Lightning Protection Zone（LPZ）	2	
Class		
According to DIN VDE6075 Part6（Draft11.89）A1,A2	D	
According to IEC61643	Ⅲ	
Max continuous operating voltage（Uc）	Network:5V Control:12V	
Nominal discharge current In（8/20μs）	3kA	
Max discharge current Imax（8/20μs）	5kA	
Limiting voltage（10/700μs）	Network:20V Control:≤40V	
Response time（Ta）	1ns	
Transmission rate	Network:100Mbps Control:10Mbps	
Insertion loss	≤0.5dB	
Working conditions	Temperature:－40～＋85℃ Relative humidity:≤95%	
Interface form	Network:RJ45 Control:Clamped type	
Standards compliance	IEC 61000、EN60950	
Electrical parameters of power supply		
Nominal working voltage（Un）	220VAC	
Max continuous operating voltage（Uc）	275VAC	
Nominal discharge current In（8/20μs）	5kA	
Max discharge current Imax（8/20μs）	10kA	
Load current	0.5A	
Protection level Up（In）	800V	
Response time（Ta）	25ns	
Working conditions	Temperature:－40～＋85℃ Relative humidity:≤95%	
Interface form	Clamped type	
Standards compliance	IEC 61643–1、EN60950、GB/T18802.21–2002、TB/T2311–2002、YD/T 1235.2	
Mechanical characteristics		
Mounting	Be Installed between protected equipment and signal line	
Dimension	88*68*38mm（No terminal and rail）	137*82*35mm
Material/color	Aluminum/Blue	
IP code（IEC EN 60529）	IP20	

MDI Surge Protector for HD Networking Camera

RJ45/connector ·5kA·5/12V



FEATURE

Low insertion loss, fast response time, and low limiting voltage
Precise limiting voltage, large discharge current
High transmission rate, low bit error rate
PCB designed with micro-strip, high isolation and slight line disturbance

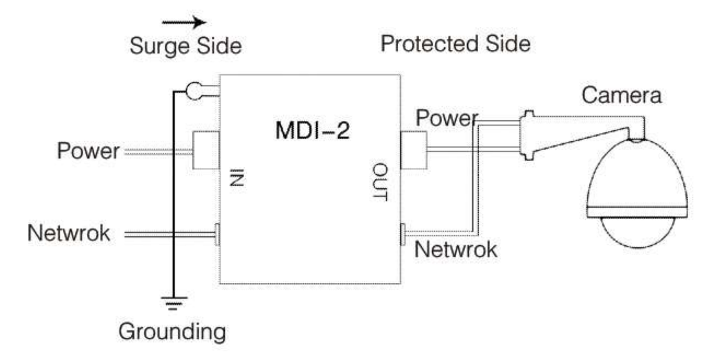
DESCRIPTION

MDI surge protector is designed for HD networking camera with PTZ control, protecting power & network line from lightning electromagnetic pulse, induced over voltage, and operating over voltage.

APPLICATION

Monitor equipment(eg power, PTZ, camera) of surveillance system
Bank monitoring system
HD surveillance system of school, enterprise and road.

INSTALLATION INSTRUCTION



MDI-2

TECHNICAL PARAMETER

Model	MDI-2-12	MDI-3-24	MDI-3-220
Network / control part of electrical parameters			
Lightning Protection Zone（LPZ）	2		
Class			
According to DIN VDE6075 Part6（Draft11.89）A1,A2	D		
According to IEC61643	Ⅲ		
Max continuous operating voltage（Uc）	Network:5V	Network:5V Control:12V	
Nominal discharge current In（8/20μs）	3kA		
Max discharge current Imax（8/20μs）	5kA		
Limiting voltage(10/700μs)component wire-component wire	Network:20V	Network:20V Control:40V	
Response time（Ta）	1ns		
Transmission rate Vs	Network:1000Mbps	Network:1000Mbps ;Control:10Mbps	
Error rate	$<10^{-12}$		
Working conditions（TU）	Temperature: –40～+85℃ Relative humidity:≤95%		
Interface form	Network:RJ45	Power、Control:Clamped type	
Standards compliance	IEC 61000、EN60950		
Electrical parameters of power supply			
Nominal working voltage（Un）	12VDC	24VAC	220VAC
Nominal discharge current In（8/20μs）	5kA		
Max discharge current Imax（8/20μs）	10kA		
Protection level Up（In）	≤60V	≤100V	≤900V
Working conditions	Temperature: –40～+85℃ Relative humidity:≤95%		
Interface form	Clamped type		
Standards compliance	IEC 61643-1、EN60950、GB/T18802.21-2002、TB/T2311-2002、YD/T 1235.2		
Mechanical characteristics			
Mounting	Be Installed between protected equipment and signal line		
Dimension	88*68*40mm（No terminal）	88*68*38mm（No terminal and rail）	
Material/color	Aluminum/Blue		
IP code（IEC EN 60529）	IP20		

Gas-tube Protector

N connector·20kA·0-3GHz

FEATURES

Large electrical and electronic discharge current
Low insertion loss, small VSWR
Gas–tube Structure
Reliable Performance from DC TO 3GHz
Multi– Strike Capability
Bi– Directional Protection
DC passed
RoHs Compliant

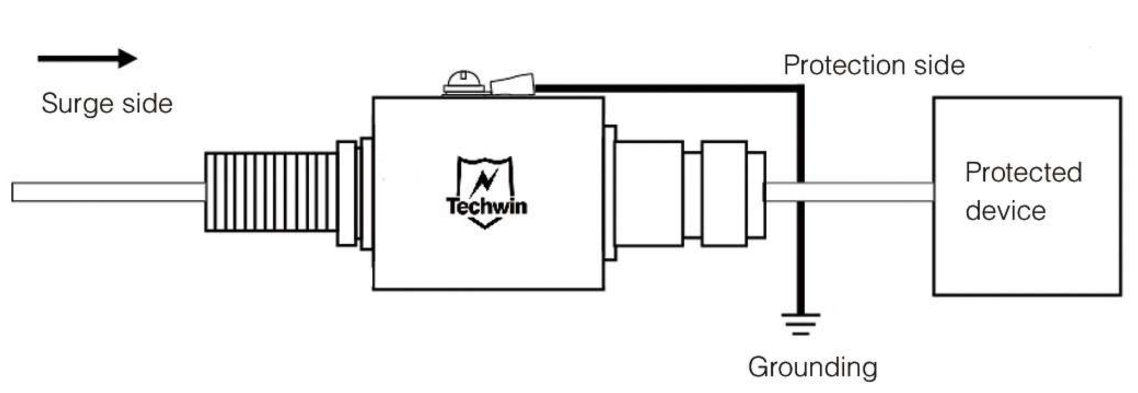
DESCRIPTION

Gas–tube protector is designed for antenna coaxial device and receive/ transmit system not to be spoiled by lightning over–voltage, induced over–voltage and static discharge.

APPLICATION

RF receiving and transmitting system
Transmitting and interface equipment of network signal wireless
Wireless transmitting and receiving equipment of industrial control signal
Satellite TV receiving equipment
Wireless transmitting and receiving equipment of monitoring signal
Other wireless communications devices
Other RF signal equipment

INSTALLATION INSTRUCTION



R30N70F

TECHNICAL PARAMETER

Model	R05U70F	R30N70F	R25D70F	R25B70F
Electrical Parameter				
Lightning Protection Zone（LPZ）	1–2			
Class				
According to DIN VDE6075 Part6（Draft11.89）A1,A2	C			
According to IEC61643	Ⅲ			
Max continuous operating voltage（Uc）	≤70V			
Max discharge current Imax（8/20μs）	20kA			
Working frequency	0–0.5GHz	0–3GHz	0–2.5GHz	
Protection level Up（In）	≤200V			
Insertion loss	≤0.2dB			
Standing–wave ratio	≤1.2			
Interface form	UHF	N	DIN	BNC
Working conditions	Temperature: –40～+85℃ Relative humidity:≤95%			
Standards compliance	IEC 61000、EN60950			
Mechanical characteristics				
Mounting	Be Installed between protected equipment and signal line			
Material/color	Copper / silver white			
IP code（IEC EN 60529）	IP20			

RF Filter

N connector ·20kA·0.8-2.0GHz

FEATURE

Large electrical and electronic discharge current
Wide frequency band
Low insertion loss small VSWR
Simple structure, easy to install and maintain
Reliable Performance from DC TO 3GHz
Multi- Strike Capability
Bi- Directional Protection
RoHs Compliant

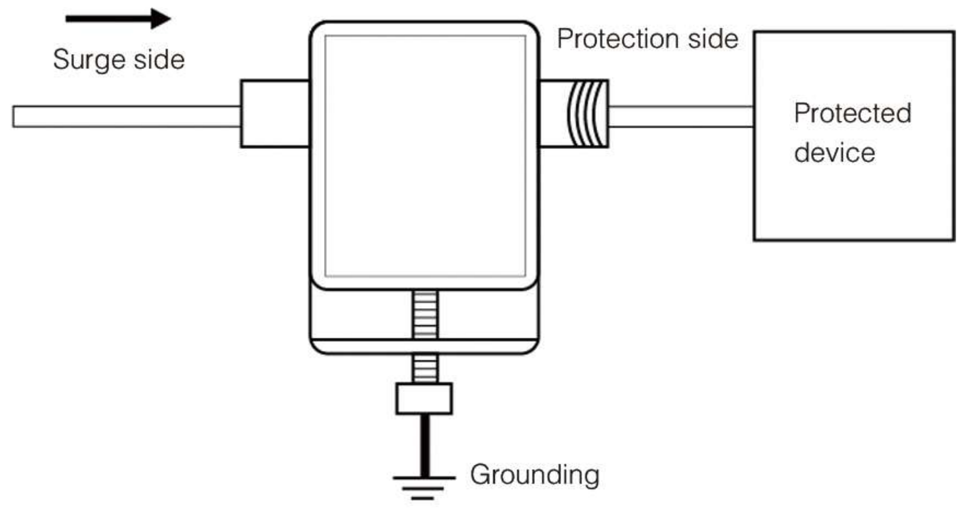
DESCRIPTION

RF Filter is designed for RF system, protecting signal line of communication equipment from lightning over-voltage, induced over-voltage, and operation over-voltage, widely applied in RF circuit protection of wireless coverage, base station, wired television, satellite television, GPS, etc.

APPLICATION

RF receiving and transmitting system
Transmitting and interface equipment of network signal wireless
Wireless transmitting and receiving equipment of industrial control signal
Satellite TV receiving equipment
Wireless transmitting and receiving equipment of monitoring signal
Other wireless communications devices
Other RF signal equipment

INSTALLATION INSTRUCTION



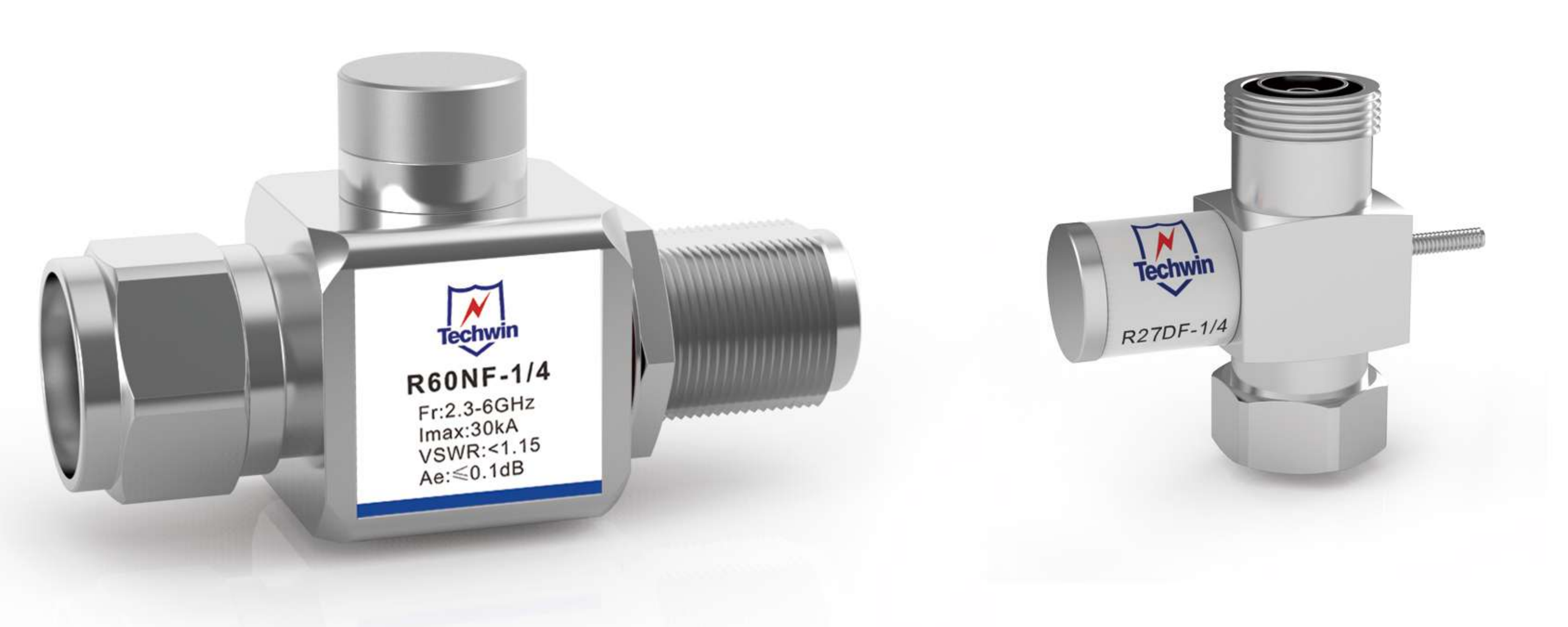
R20NM-S

TECHNICAL PARAMETER

Model	R05NF	R19NF	R20TW	R20TF-S	R20NM-S
Electrical Parameter					
Lightning Protection Zone (LPZ)	1-2				
Class					
According to DIN VDE6075 Part6 (Draft11.89) A1,A2	C				
According to IEC61643	Ⅲ				
Max discharge current Imax (8/20 μ s)	20kA			10kA	
Working frequency	0.4-0.5GHz	1.7-1.9GHz	1.8-2.0GHz	0.8-2.0GHz	
Protection level Up (In)	≤30V				
Insertion loss	≤0.2dB				
Standing-wave ratio	≤1.2				
Interface form	N	N	TNC	TNC	N
Working conditions	Temperature: -40 ~ +85℃ Relative humidity: ≤95%				
Standards compliance	IEC 61000、EN60950				
Mechanical characteristics					
Mounting	Be Installed between protected equipment and signal line				
Dimension	90×72×35mm			Φ18.5×70mm	Φ20×90mm
Material/color	Aluminum/silver white				
IP code (IEC EN 60529)	IP20			IP22 (Waterproof type)	

Hybrid Quarter Wave RF Protector

N connector ·40kA·2.3-6GHz



FEATURE

Large electrical and electronic discharge current
Wide frequency band
Low insertion loss, small VSWR
QWS Technologies
Reliable Performance from DC TO 3GHz
Low strike throughput energy
Multi– Strike Capability
Bi– Directional Protection

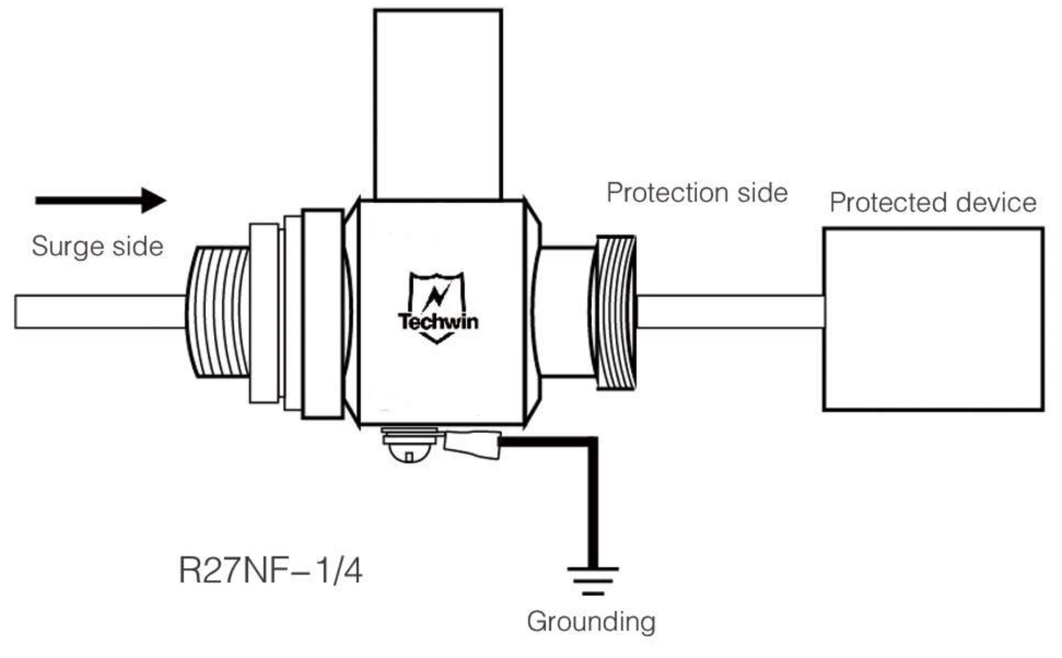
DESCRIPTION

Quarter–wave RF protector is designed for RF system, protecting signal line of communication equipment from lightning over–voltage, induced over–voltage, and operation over–voltage, widely applied in RF circuit protection of wireless coverage, base station, etc.

APPLICATION

RF receiving and transmitting system
Transmitting and interface equipment of network signal wireless
Wireless transmitting and receiving equipment of industrial control signal
Wireless transmitting and receiving equipment of monitoring signal
Other wireless communications devices
Other RF signal equipment

INSTALLATION INSTRUCTION



TECHNICAL PARAMETER

Model	R27DF–1/4	R27NF–1/4	R60NF–1/4	R05NF–1/4
Electrical Parameter				
Lightning Protection Zone（LPZ）	1–2			
Class				
According to DIN VDE6075 Part6（Draft11.89）A1,A2	C			
According to IEC61643	II			
Max discharge current Imax（8/20μs）	50kA	30kA	30kA	30kA
Working frequency	0.8–2.7GHz	0.8–2.7GHz	2.3–6GHz	0.4–0.5GHz
Protection level Up（In）	≤200V			
Insertion loss	≤0.1dB			
Standing–wave ratio	≤1.15			
Working conditions	Temperature:－40～＋85℃ Relative humidity:≤95%			
Standards compliance	IEC 61000			
Mechanical characteristics				
Mounting	Be Installed between protected equipment and signal line			
Interface form	DIN	N	N	N
Material/color	Copper/silver white			
IP code（IEC EN 60529）	IP20			

Combination type antenna protector

DIN connector ·20kA·0.75-2.5GHz

FEATURE

Large electrical and electronic discharge current
Wide frequency band
Low insertion loss
Small VSWR
Feeding power supply
Simple structure, easy to install and maintain
DC pass

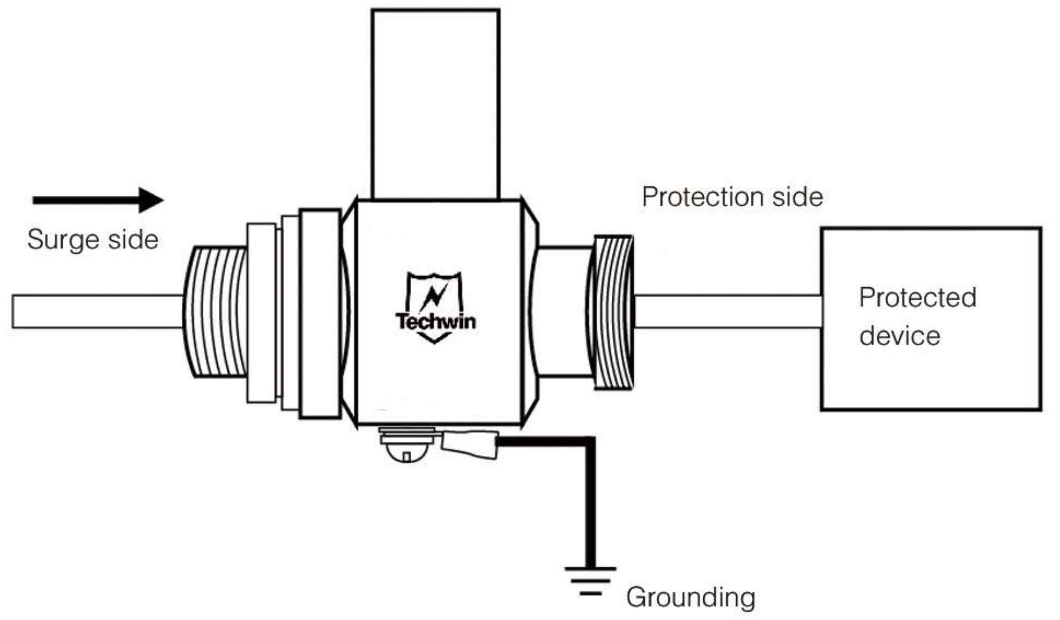
DESCRIPTION

Combination type antenna protector is designed for DC, low frequency and RF signal one-line transmission, protecting power line and signal line of communication equipment from lightning over-voltage, induced over-voltage, and operation over-voltage, widely applied in RF circuit protection of wireless coverage, base station, etc.

APPLICATION

RF receiving and transmitting system
Transmitting and interface equipment of network signal wireless
Wireless transmitting and receiving equipment of industrial control signal
Satellite TV receiving equipment
Wireless transmitting and receiving equipment of monitoring signal
Other wireless communications devices
Other RF signal equipment

INSTALLATION INSTRUCTION



R25D-FH

TECHNICAL PARAMETER

Model		R25D-FH	R25N-FH
Electrical Parameter			
Lightning Protection Zone (LPZ)		1-2	
Class			
According to DIN VDE6075 Part6 (Draft11.89) A1,A2		C	
According to IEC61643		II	
Max continuous operating voltage (Uc)		≤70V	
Max discharge current Imax (8/20μs)		20KA	
Working frequency	E1 port transmission	2M	
	RF transmission	0.75-2.5GHz	
Protection level Up (In)		≤200V	
Insertion loss		≤0.15dB	
Standing-wave ratio		≤1.15	
Working conditions		Temperature: -40 ~ +85℃ Relative humidity: ≤95%	
Standards compliance		IEC 61000、EN60950	
Mechanical characteristics			
Mounting		Be Installed between protected equipment and signal line	
Interface form		DIN	N
Material/color		Copper / silver white	
IP code (IEC EN 60529)		IP20	

Wind Power SPD

Class C ·40kA·230V-700V

FEATURE

- Thermal disconnect device
- Remote alarm
- Status indicator
- Large discharge current
- DIN rail mounting for easy installation
- Plug connectors for quick and easy connection or rewiring
- Star structure for different connection methods

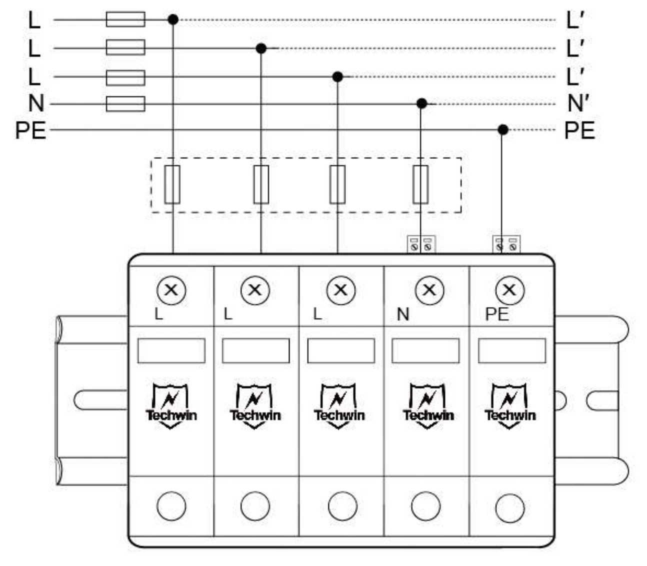
DESCRIPTION

Wind power SPD is mainly used to protect wind power system equipment and numerous sensitive electric and electronic equipment in fan (blower) from lightning over–voltage and transient over–voltage, widely applied in power line protection in wind power system's distribution box, photovoltaic combiner box and AC/DC distribution box.

APPLICATION

- DC power system
- DC switchboard
- DC distribution box.
- Electronic information system box
- Output of second Power equipment

INSTALLATION INSTRUCTION



M40W–690

TECHNICAL PARAMETER

Model	M40W–690	M40W–400	M40W–230
Electrical Parameter			
Lightning Protection Zone（LPZ）	1–2		
Class			
According to DIN VDE6075 Part6（Draft11.89）A1,A2	C		
According to IEC61643	II		
Nominal working voltage（Un）	690V	400V	230V
Max continuous operating voltage（Uc）	700VAC	440VAC	250VAC
Nominal discharge current In（8/20μs）	20KA		
Max discharge current Imax（8/20μs）	40KA		
Protection level Up（In）	3000V	2200V	1500V
Response time（Ta）	≤25ns		
Protection model	L L L N–PE	L L L– PE	L,N– PE
Working conditions	Temperature: –40～+85℃　Relative humidity:≤95%		
Standards compliance	IEC 61643、EN60950		
Mechanical characteristics			
Mounting	DIN rail mounting 35mm		
Max connecting line diameter	25 mm²		
Recommend connecting line diameter	≥16mm²		
Largest terminal installation torque	6–8N.m		
Dimension	90*90*65mm	90*54*65mm	90*36*65mm
Material/color	PA66GF30Vo		
IP code（IEC EN 60529）	IP20		
Quantity of modules	5	3	2

DC Module for Photovoltaic System

Class C ·40kA·400V-1000VDC

FEATURE

Remote alarm
Status indicator
Low residual, short response time
Thermal disconnect device
Temperature control to protect circuit
DIN rail mounting for easy installation
Plug connectors for quick and easy connection for rewiring

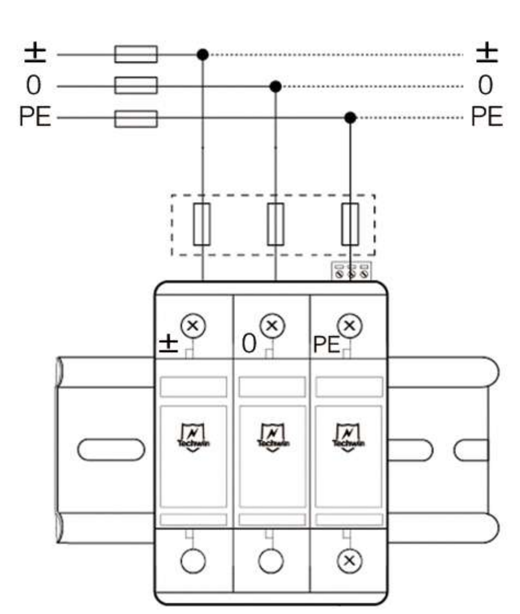
DESCRIPTION

DC Module for Photovoltaic System is mainly used to protect DC power system and electric equipment from lightning over–voltage and transient over–voltage, widely applied in photovoltaic combiner box, inverter and DC distribution box.

APPLICATION

DC power system
DC distribution board
DC power supply equipment
DC distribution box
Electrical information system cabinet
Output of second Power equipment

INSTALLATION INSTRUCTION



M40–1000

TECHNICAL PARAMETER

Model	M40–400	M40–500	M40–600	M40–800	M40–1000
Electrical Parameter					
Lightning Protection Zone（LPZ）	1–2				
Class					
According to DIN VDE6075 Part6（Draft11.89）A1,A2	C				
According to IEC61643	II				
Nominal working voltage（Un）	400VDC	500VDC	600VDC	800VDC	1000VDC
Max continuous operating voltage（Uc）	500VDC	650VDC	800VDC	1000VDC	1200VDC
Nominal discharge current In（8/20μs）	20KA				
Max discharge current Imax（8/20μs）	40KA				
Protection level Up（In）	1200V	1500V	2000V	2500V	3000V
Response time（Ta）	≤25ns				
Protection model	+，– – PE				
Working conditions	Temperature: – 40 ~ + 85℃ Relative humidity:≤95%				
Standards compliance	IEC 61643、EN60950				
Mechanical characteristics					
Mounting	DIN rail mounting 35mm				
Max connecting line diameter	25 mm²				
Recommend connecting line diameter	≥16mm²				
Largest terminal installation torque	6–8N.m				
Dimension	90*54*65mm				
Material/color	PA66GF30Vo				
IP code（IEC EN 60529）	IP20				
Quantity of modules	2	2	2	3	3

AC/ DC Power Lightning Distribution Box

10-50KW·5-100V

FEATURE

Famous brand for core components
Reasonable layout and nice appearance
Be easy installed and simple maintenance
Remote monitoring and anti– reversion
Adjustable in–ports and out–ports

APPLICATION

There is AC distribution unit and DC distribution unit inside the product. DC distribution unit mainly distribute converge DC power from PV Module into inverter and C distribution unit mainly provide interface port for grid–connect by power distribution.

DESCRIPTION

AC/ DC Power Lightning Distribution Box is mainly applicable to power distribution system below 50KW for lightning protection. DC distribution unit mainly distribute converge DC power from PV module into inverter and AC distribution unit mainly provide interface port for grid–connect by power distribution..AC and DC power lightning distribution box can protect the system from electric leakage, open circuit, overload and lightning shock damage and keep the equipment to run normally.

TECHNICAL PARAMETER

Power	Input / output current	Input / output voltage	Dimension	Working condition
10–100KW	5–100A	220/380VAC	450*330*142mm	Temperature:–40~+85℃
		48–1000VDC		Relative humidity:≤95%

AC/ DC Power Distribution Cabinet

30-300KW·50-300A

FEATURE

Famous brand for core components
Reasonable layout and nice appearance
Be easy installed and simple maintenance
Remote monitoring and anti– reversion
Adjustable in–ports and out–ports

APPLICATION

There is AC distribution unit and DC distribution unit inside the product. DC distribution unit mainly distribute converge DC power from PV Module into inverter and C distribution unit mainly provide interface port for grid–connect by power distribution.

DESCRIPTION

AC/ DC Power Distribution Cabinet is mainly applicable to power distribution system 50KW–300KW for lightning protection. DC distribution unit mainly distribute converge DC power from PV module into inverter and AC distribution unit mainly provide interface port for grid–connect by power distribution..AC and DC power lightning distribution box can protect the system from electric leakage, open circuit, overload and lightning shock damage and keep the equipment to run normally.

TECHNICAL PARAMETER

Power	Input / output current	Input / output voltage	Size	Working conditions
30–500KW	50–1500A	220/380VAC	2200*800*600mm	Temperature:–40~+85℃
		48–1000VDC		Relative humidity:≤95%

Lightning Combiner Box for PV Array

48-1000VDC·40-100KA

FEATURE

Dust prevention
Waterproof, corrosion prevention
PV–specific SPD with good lightning protection effect.
Famous brand for core component with excellent performance
Easy in install and simple for maintenance
Remote monitoring and anti– reversion function
DC input voltage and max open–circuit voltage can be as high as 1000V
Design according to user needs for customization products

APPLICATION

PV grid–connected power system, connecting PV Module to DC distribution cabinet or inverter.

DESCRIPTION

Lightning Combiner Box for PV Array is installed between PV module and inverter, to reduce connecting line between PV module, DC power distribution cabinet, and inverter. Lightning Combiner Box for PV Array have the function of converging lightning protection,the counter–attack, waterproof, monitoring, corrosion prevention etc.Withstand Voltage≥1000VDC.

TECHNICAL PARAMETER

short–circuit current	working voltage	Max Number of Input–ports	Max current of every PV Array	Number of Out– ports	Max Discharge Current	IP code	Dimension	Working condition
	48–1000V	3–20	≤125A	1–3	40–100KA	IP65	Customization products	temperature:–40~+85℃, Relative humidity:≤95%

Component

Grounding wire

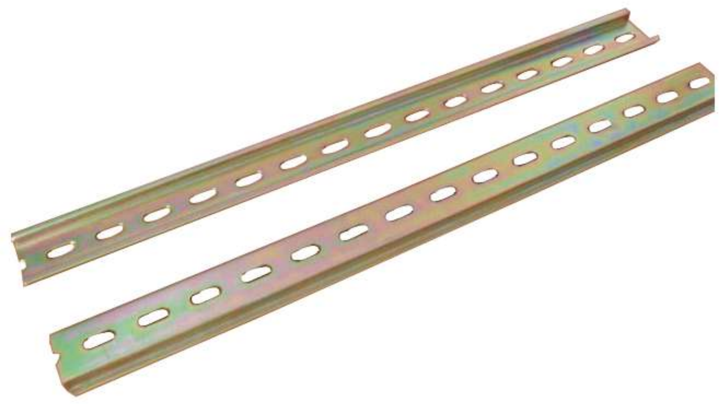
Name	Specification	rated capacity	Introductions
BV–450/750	1*1.5mm² ;Yellow green;sub–thread	24A	Electric control secondary wiring
BVR–450/750	1*2.5 mm² ;Yellow green; multi–strand	32A	A minimum circuit wiring appliances,Current transformer to current meter wiring
BVR–450/750	1*16mm² ;Yellow green;multi–strand	105A	Electric circuit wiring at a time

Connecting line

Name	Specification	Introductions
RG58 IP over Coaxial (Video line)	4 mm² ; Characteristic impedance:50 Ω ;Communication Distance:≤300m	Used in Ethernet signal transmission normally
SYV75–5 IP over Coaxial (Video line)	5 mm² ;Characteristic impedance:75 Ω ; Communication Distance:≤800m	Telecommunication, broadcasting equipment、Wireless and electronic equipment、Video signal transmission
CAT5 Network line(data line(cat 5))	24AWG;Wire diameter:0.51 mm² ; Current–carrying capacity:0.9A	100M ethernet network signal transmission
CAT6 Network line(data line(cat 6))	23AWG;Wire diameter:0.57 mm² ; Current–carrying capacity:1.2A	100M ethernet network signal transmission
BVR–450/750 Power line	1*35 mm² ;Red line; Green/ Blue (Neutral)	




Mounting



Name	Specification	Introductions
U shaped guide rail	steel;zinc plating–coloring; Dimension (wide,depth,thickness): 35*7.5*1mm	European industrial standard of industrial electrical components installation, easy to install.

Testing equipment

Baking box

Multi–band passive intermodulation test instrument

Lightning protection component tester

Network analyzer

Crystalloid tester

Earth resistance tester

The instrument of thermal stability

Dielectric strength tester

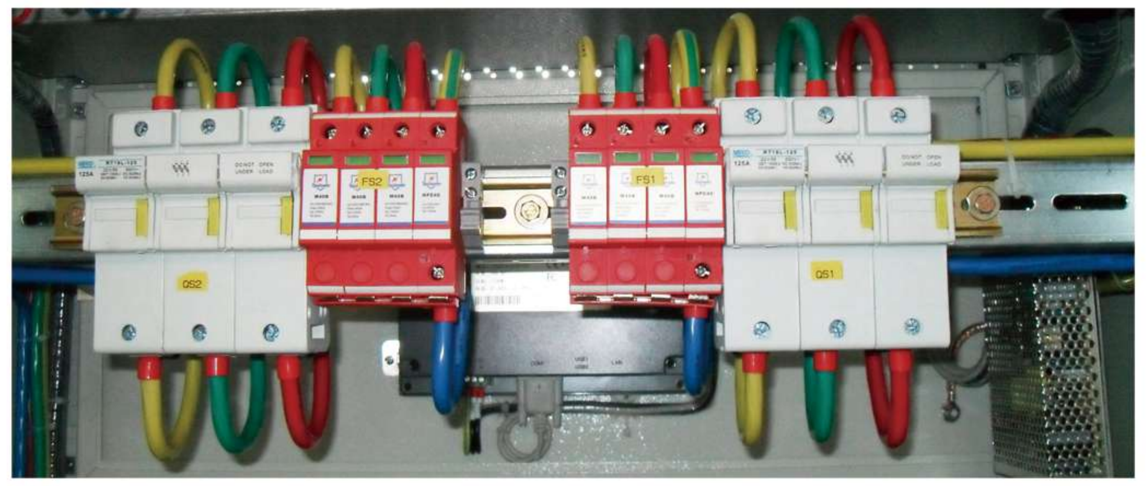
Impulse current generator

TECHWIN Standard Quality Control:

Operating voltage Protection level Signal state VSWR Insert loss

Safety inspection Hot and cold test Vibration test Appearance

Customer Reference



New energy case

USA Pavilion PV project of the Shanghai World Expo

Phase one and two mechanical and electrical photovoltaic power station of Beijing

Beijing sunshine campus photovoltaic power station project

KUNMING PV test release power station

Shangdong gaotang 5MWp PV station

Shenzhen nanbo industrial park grid generation PV demonstration project.

East sunrise industrial park PV grid power generation demonstration project.

The 2th phase of BeiKong golmud 20M grid generation PV station.

Ninghai sunrise hill new factory PV power demonstration project.

Hebei aoguang PV station

Henan province wind electric industrial park new energy PV station

BDY PV station etc.

Safety city case

Shenzhen,zhenzhou,guangzhou,yangjiang safety city and so on.

Shenzhen metro

Shenzhen National University Games' badminton stadium monitoring of lightning protection project.

Nei Mongol tongliao city safety city digital monitor system project

Tibet telecom safety city monitor lighting protect project.

Vanke Real Estate & Jindi Real Estate strategic partner.

Guangzhou,qinhuan island smart city project

Wireless network case

Henan mobile WLAN wireless city covers lightning protection engineering.

Shangdong mobile WLAN wireless city covers lightning protection engineering.

China telecom yunan company communication lighting protection station

Wuxi telecom wireless central high–speed station adjustment.

Jiangsun telecom C network computer room project.

Guangdong global system for mobile communications

Intelligent transportation case

Tibet emergency command network communication and monitor of lighting protection.

Foshan/yushu/shantou city ITS project

Nanjing city jiangsun province the 320 road monitoring network lighting protection

2014guangzhou bus road project

The 2th high speed north of the guangzhou 5.8G free project.

State grid sichuan electric power company substation lightning defense project

Security monitoring case

Shenzhen qiling mountain villa intelligent project

Hebei province xingtai south shimen town delong steel mill factory monitor lighting protection project

Guangzhou BRT road high speed monitor control system

Yibin Wu liang ye co., LTD is food safety monitoring system of equipment procurement and installation work.

Nanchang traffic monitoring maintenance projects