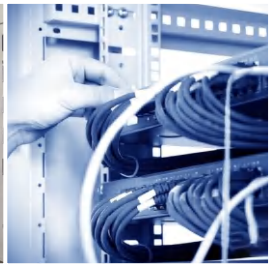
THOR

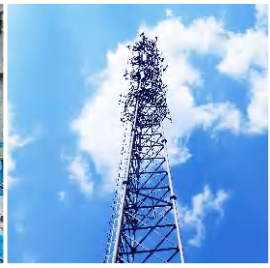
PROTECTOR OF LIGHTNING PROTECTION

– SINCE 2006 –

Catalogue
Surge Protective Devices





Company Profile

THOR is a manufacturer specialised in the development and production of surge protective devices since 2006. THOR offers a complete range of SPDs, such as AC power SPD, PV system SPD, Signal and network SPD, Coaxial RF SPD, lightning rod, lightning box, etc.

THOR SPDs are applied to lightning protection in different low–voltage system fields, such as industry, solar power generation systems, telecommunications, network data centers, office buildings, and homes, etc.

Semi-automatic welding equipment

- Maintain consistent temperature of welding iron head
- Maintain consistent tin production during welding
- More precise welding positions
- Reduce false soldering caused by manual welding

Semi-automatic factory inspection pressure sensitive tester

- Accurately set the positive and negative tolerances for voltage and leakage current
- Supporting fixtures to improve testing efficiency
- If the detection data exceeds the set range, there is an alarm warning function
- MOV 100% factory inspection

Simulated lightning impact test bench (capable of meeting T2:120KA/T1:25KA)

- By simulating lightning stroke testing, the product's ability to withstand lightning current can be verified. It can guarantee the most reliable and safe high–quality products for users.

Enterprise Certificates

As a manufacturer of surge protective devices that pursues high quality,THOR invests a considerable proportion of its annual revenue in innovation,research and development, and international certification to meet the needs of customers in different fields,obtaining more and more certificates to ensure that our SPDs can be distributed in every corner of the world.

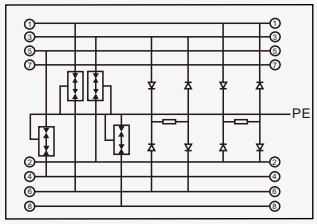
TRSS-RJ45 Series SPD

SPD for Data Networks and Ethernet Applications

- Indeally suited for retrofitting,Protection of all lines
- For installation in conformity with the lightning protection zone concept at the boundaries from OB-2 and higher

Product

Basic circuit diagram



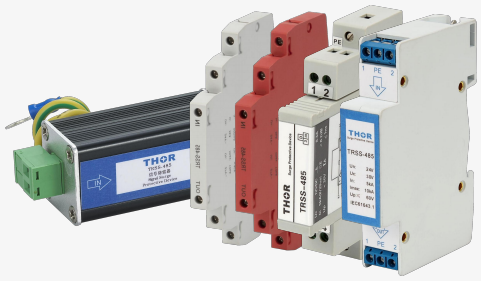
Parameter/Type	TRSS-RJ45	TRSS-RJ45/16 For 19"Cabinet	TRSS-RJ45/24 19"Cabinet
Material/Ports numbers	PA66/Aluminum/single port	Aluminum/16 ports	Aluminum/24 ports
Nominal volatge	48V		
Maximum operating voltage(d.c.)	50V		
Maximum operating voltage(a.c.)	34V		
Maximum operating voltage(d.c)pair-pai(PoE)	57V		
Nominal Current	1A		
Current flow (8/20 μs)(L-L)	5kA		
Current flow (8/20μs)(L-PE)	10kA		
Voltage protection level(L-L)	60V		
Voltage protection level(L-PE)	500V		
Cut-off frequency	250MHz		
Insertion loss at 250 MHz(1000Mpbs)	≤0,5dB		
Connection (inputy output)	Rj45 Socket/RJ45 socket		
Pinning	Data:1/2/3/6;PoE:4/5/7/8		
Response time t_a	<25ns		
Degree of Protection	IP20		
Range of operating temperatures(min/max)	-40℃~+70℃		
Humidity range	5%~95%		
According to standard	EN 61643-21:2012,IEC 61643-21:2011		

TRSS-485 Series SPD

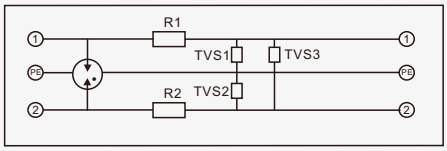
RS485 surge protector. The surge protector is connected in series in front of the protected equipment, and is mainly suitable for communication lines, remote signaling, measurement and control systems, access control intercom systems, automatic control systems, security systems, etc, which can effectively absorb the energy generated by surges Impact, and introduce energy into the earth through the grounding cable.

- Protect a pair of signal lines from lightning surge
- DIN rail installation saves a lot of space
- A variety of protection voltages are available, such as 5V 12V 24V 100V.
- The maximum discharge current is 10kA.

Product



Basic circuit diagram



Parameter/Type		TRSS-485			
Material/ width		Aluminum, PA66/ 7mm, 14mm, 18mm .			
Nominal volatge	U_n	5V	12V	24V	100
Maximum operating voltage	U_c	8V	15V	30V	110
Frequency		30 MHz			
Insertion loss		≤0,5dB			
Standing wave		1,2			
Nominal discharge current (8/ 20μs)	I_n	5 kA			
Maximum discharge current (8/ 20μs)	I_{max}	10 kA			
Voltage protection level	U_p	< 20V	< 40V	< 60V	< 150V
Mounting		DIN rail 35mm			
Degree of protection		IP20			
Range of operating temperatures (min/ max)		-40℃~+70℃			
Humidity range		5%~95%			
According to standard		EN 61643-21:2012, IEC 61643-21:2011			

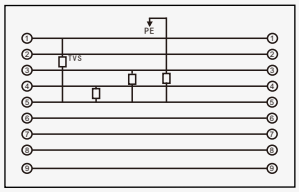
TRSS-DB Series SPD

TRSS–DB serial lightning protection device is designed according to IEC and GB standards, and is widely used in the surge protection of the DB serial communication system in industrial control, telecommunications, local area networks and commercial and military fields. The grounding cable can be grounded through the metal shell of the DB serial port.The grounding path should be as short as possible, and the length should not exceed 1.5 meters.

- Fine protect the communication line
- Fast response, and low limte voltage
- Terminal type: DB9, DB15, DB25
- Low insert loss .

Product

Basic circuit diagram



Parameter/Type		TRSS-DB9/DB15/DB25	
Nominal volatge	U_n	5V	12V
Maximum operating voltage	U_c	8V	15V
Transmission speed	f_g	45 MHz	
Insertion loss		≤0,5 dB	
Nominal discharge current (8/20μs)	I_n	100A	
Voltage protection level	U_p	<80V	
Degree of protection		IP20	
Range of operating temperatures (min/max)		-40℃~+70℃	
Humidity range		5%~95%	
According to standard		EN 61643-21:2012, IEC 61643-21:2011	

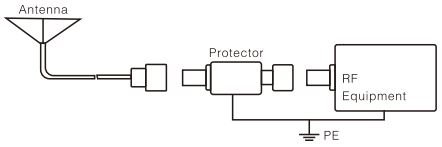
TRSW Series coaxial SPD

TRSW Coaxial cable Surge Protector should be installed between two coaxial cable connectors or two communication equipments to effectively prevent the communication equipments from being damaged by transient forming from nearby strike. This product has high capacity of surge current and a wide frequency range, thus it is ideal protector for various communication equipment.

Installation:

This protector is applicable in indoors, it should be installed between two coaxial cable connectors or two communication equipments, the cross section of grounding wire should no less than 4mm2, and be wired with the earthing terminal of prevented equipment.

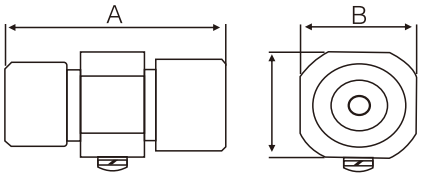
Installing figure:



Features:

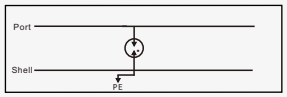
- With replaceable integrated gas discharge tube
- Fast response without interruption
- Metal shell N, SMA, BNC, TNC, F type connectors, easy to install.

Dimension(mm):



Product

Basic circuit diagram



Interface Type	BNC	N	TNC	SMA
A	57.2	59.4	57.2	48.4
B	25	25	25	25
C	25	25	25	25

Parameter/Type	TRSW					
Frequency Range	(BNC: DC–2GHz) (N、TNC、SMA:DC–2.5GHz)					
Impendence	50Ω					
VSWR	<1.2					
Insertion loss	≤0.3dB					
Input Power	< 20W	< 50W	< 100W	< 200W	< 400W	< 500W
Initial Discharge Voltage	≥50V	≥70V	≥120V	≥190V	≥280V	≥280V
Current Capacity	10kA					
Interface Type	BNC; N; TNC; SMA					
Housing material	Brass HPb59–1, GB4425–84					
Degree of protection	IP20					
Range of operating temperatures (min/ max)	–40℃~+70℃					
Humidity range	5%~95%					
According to standard	EN 61643–21:2012, IEC 61643–21:2011					

Cherish resources
Be kind to the environment

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