

# Coupling/decoupling network for unshielded symmetric high-speed communication line of lightning surge test

## CDN 405T8A1



### As per

- > IEC 61000-4-5
- > EN 61000-4-5
- > GB/T 17626.5

### Description

CDN 405T8A1 is designed to test high-speed communication line against lightning surge as per picture 10 in IEC/EN 61000-4-5: 2014. Data transfer rate is up to 1,000MBit/s. High conductive magnetic material is used as decoupling device with stable decoupling performance and transfer rate.

### Features

- > High conductive magnetic material for decoupling device;
- > test output to 4-path 8-line communication line;
- > transfer rate up to 10MB/100MB/1000MB;
- > Surge waveforms superimposed;
- > Powerful withstand surge impulse capacity, Max. withstand peak voltage is up to 10kV (standard: 6kV)
- > Replaceable current-limiting resistor

### Industries

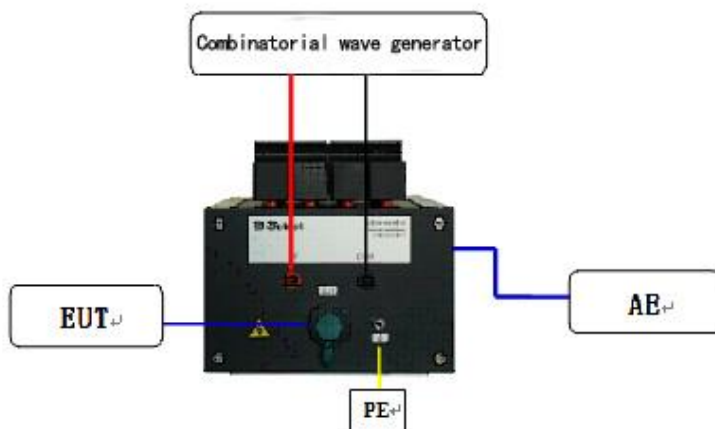
- > Communication
- > Telecom
- > Medical
- > Broadcast
- > Railway
- > Technology
- > Military
- > Avionics
- > New energy

Technical parameters	
Model	CDN 405T8A1
Standard	IEC 61000-4-5: 2017 IEC 61000-4-5: 2005
Coupling waveform	1.2/50us, 10/700us
Coupled current waveform	8/20us、5/320us
Pulse voltage	6kV (10 kV, customized)
Coupling mode	Common mode (line to ground)
Coupling device	90V gas discharging tube
Output impedance	Current-limiting resistance can be replaced according to test requirements
Communication port	RJ45 female connector to connect telecommunication cable
Pin layout	Pair 1: pins 1 / 2 Pair 2: pins 3 / 6 Pair 3: pins 4 / 5 Pair 4: pins 7 / 8
Data rate	10MBit/s、100MBit/s、1,000MBit/s
Working voltage	DC:3-12V
Working current	Max. 1A
Residual voltage	<15% (coupling surge voltage)

Optional accessories		
SZR25	25ohm (as per 10/700us、5/320us)	
SZR100	100ohm (as per 10/700us、5/320us)	
SZR160	160ohm (as per 1.2/50us、8/20us)	
SZR320	320ohm (as per 1.2/50us、8/20us)	
Accessories		
HV cable	1m HV silicon cable with banana plug	2
Ground cable	0.3m yellow green	1
Short connector	U type	8
Internet cable	1m cat 6 internet cable	2
SZR200	Current-limiting module	8
Document	Factory test report	1
	User manual	1

General data	
Weight	3.6Kg
Dimension	250x200x133cm(long x wide x high)
Enclosure material	Alloy
emperature	15°C-35°C operating environment
Humidity	45%-75%
Package case	carton

Test connection schematic:



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