

LoRa Wi-Fi LTE SPD Datasheet

Overview

Description

LA-GT2700 DN1-5 is a Surge Protective Device (SPD) for the protection of the transceiver against over-voltage and surge current induced by lightning. It can be used with a 50 Ω system with a frequency range of 0 to 2700 MHz and transmission power up to 200 W. It is suitable to be used for LoRa, Wi-Fi, and LTE antennas.

For the purpose of protecting the indoor equipment and circuitry connected to the LoRa gateway, you need to install an Ethernet port Surge Protection Device (SPD).

Features

- Connector Type: **N-type male to N-type female**
- Impedance: **50 Ω**
- Frequency Range: **0-2700 MHz**
- Power Loss **0-2000 MHz: ≤ 0.2 dB**
- Ingress protection: **IP67**

Specifications

Hardware

Electrical Characteristics

Parameter	Value	Remarks
Frequency	0~2700 MHz	
SPD type	Switching type	
Connector	N-type male to N-type female	
Port impedance	50 Ω	
Maximum transmission power	≤ 200 W	
DC startup voltage	600 V \pm 25%	
Voltage standing wave ratio (VSWR)	0-2000 MHz : ≤ 1.2 Other frequency : ≤ 1.25	
Insertion loss	0-2000 MHz : ≤ 0.2 dB Other frequency : ≤ 0.3 dB	
Nominal discharge current I_n	10 kA	8/20 μ s
Maximum discharge current I_{max}	20 kA	8/20 μ s
Voltage protection Level Up	≤ 1200 V	
Degree of ingressive protection	IP67	GB 4208
Mounting	N-F port metal wall-through fixation	
Grounding	N-F port metal wall-through fixation or grounding by grounding connector	
Weight	≤ 180 g	

Environmental Characteristics

Operation environment:

Parameter	Value
Ambient temperature	-40° C ~ 70° C
Relative humidity	5% ~ 95%
Atmospheric pressure	70 kPa ~ 106 kPa

Storage environment:

Parameter	Value
Ambient temperature	-40° C ~ 80° C
Relative humidity	5% ~ 95%
Atmospheric pressure	70 kPa ~ 106 kPa

Standards

- YD/T 1542-2006 Technical requirements and testing methods for Surge Protective Device of signaling networks.
- Q/70924537-1.01-2000 General requirements for electronic surge protective device.
- GB4943.2001/IEC60950:1999 Safety of information technology equipment.
- GB/T18802.21-2004/IEC61643-21:2000 Low-voltage surge protective device-Part 21: Surge protective device connected to telecommunications and signaling networks-performance requirements and testing methods.

Mechanical Characteristics

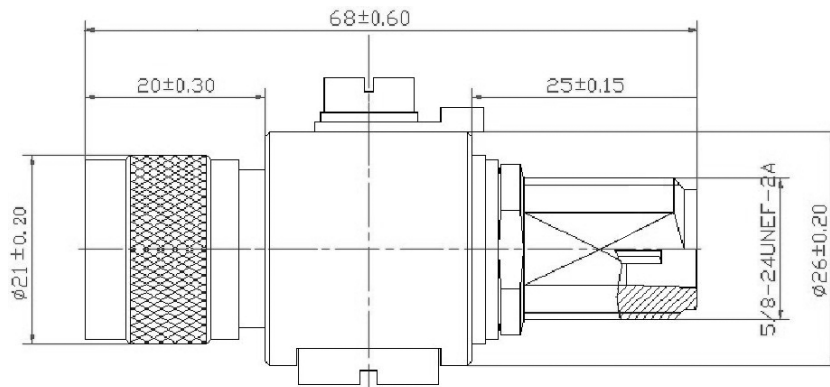


Figure 1: Mechanical Dimensions

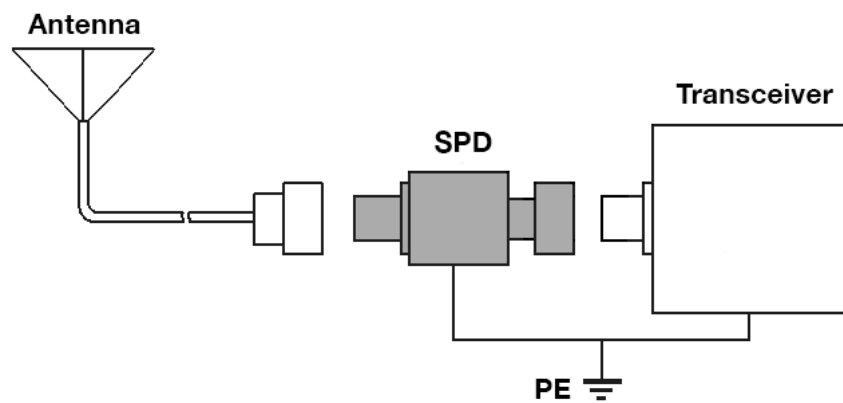


Figure 2: Typical Use