

## Lightning Surge Arrestor Gas Tube Protector

Lightning can generate high power surges to electronic equipment and extensively damage communications networks. Lightning protectors are therefore used to protect equipment from these harmful impulses. Protection devices should be physically located close to the equipment; the closer the better. Common locations in wireless infrastructure are at the top of the mast where transmission lines exits the antenna & at the entrance or right next to the equipment. Tower mounted equipment require additional lightning protection.

Gas Discharge Tube Protectors contain a gas capsule placed between the inner and outer conductors. Unlike quarter wave protectors, Gas tube surge arresters are broadband devices.

Gas discharge protectors work as a voltage filter. During normal operation, the gas inside the tube is & remains inert. Signals can pass through the surge arrester to the equipment. When lightning strikes, the antenna current will flow through the cable to the surge protector.

The voltage appearing across the capsule increases, when it reaches the DC spark over voltage, the gas ionises and becomes conductive. Current is then diverted through the gas capsule to ground.

## LIGHTNING PROTECTION

## **RJN-ST-N1N0**

Electrical Creations

Electrical Specifications	
Frequency range	DC-5.875 GHz
VSWR	1.25:1 Max @ DC-4GHz
VSWR	1.45:1 Max @ 4-5.875GHz
Insertion Loss	0.5dB Min @ DC-5.875GHz
Impedance	50 Ohms
DC Breakdown Voltage	90 V +/-15%
Impulse Breakdown Volt	1000 V
Insulation Resistance	10000 M Ohms
RJN-ST-N1N0 Connector	N Male to N Female
RJN-ST-N0N0 Connector	N Female to N Female
Weight	105 Grams
Overall Size Max	61 x 27.5 x 23mm



Supplied with Waterproof Tape & 50cm Grounding Cable