

ST1-G

Telecommunications Protector Modules

1 Pin Series

Balanced Gas Discharge Tube Technology



GAS TUBE TECHNOLOGY:

LEA Networks ST1-G Series 1 Pin modules utilize a state of the art balanced gas discharge tube and optional self-resetting PTC technology to protect the telecommunications network from overvoltages and overcurrents (sneak currents) caused by lightning, electrostatic discharges, AC induction and AC power faults. The ST1-G series 1 pin modules are always on guard protecting the infrastructure while remaining transparent to the telecommunications network, allowing for maximum speed and bandwidth without signal degradation. The ST1-G is compatible with any telecom protocol from POTS to VDSL2+ and beyond.

INDUSTRY COMPATIBILITY:

The ST1 series modules are compatible with any industry standard 1 pin protector block at:

- Central Offices
- Remote Terminals
- Building Entrance Terminals
- Customer Premises installations

FEATURES:

- Stops damaging transients without signal loss
- Reduces down time, network troubles and service calls
- Suitable for high speed networks, including VDSL2 and Category 5 rates
- Designed to meet Telcordia GR-974-CORE, NEC, and CSA requirements
- 6 year warranty (contact factory for details)
- Very low capacitance and capacitive unbalance
- Suitable for high exposure areas and installations with high ground impedance
- UL and cUL listed to UL497



SAFETY AND COMPLIANCE:

Overvoltage breakdown is available in 230V or 350V ratings. Overcurrent protection rating is 180mA and is self resetting. Each 1 pin module is equipped with an internal balanced fail-short mechanism to ensure personnel safety and superior equipment protection in accordance with NFPA, UL and Telcordia requirements.

A WORLDWIDE LEADER IN PROTECTION AND CONNECTIVITY PRODUCTS:

LEA Networks is a worldwide leader in splitter, Power Line Communication (PLC), and surge protection systems for the telecommunication industry. LEA Networks is ISO 9001:2008 registered, has extensive experience and a reputation for customer satisfaction, and is totally focused and committed to provide unmatched value in products and services to telecommunications network operators globally.

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Over Voltage Performance	230V	350V	Notes
DC Limiting Voltage	184-276 volts	265-500 volts	DC to 2kV/second
Impulse Limiting Voltage	<450 volts	<750 volts	At 100V/microsecond
	<650 volts	<900 volts	At 1000V/microsecond
Impulse Surge Life	>3000 surges	>3000 surges	10Amp, 10/1000usec
	>300 surges	>300 surges	100Amp, 10/1000usec
	>100 surges	>100 surges	500Amp, 10/1000usec
Impulse Reset	<30 milliseconds	<30 milliseconds	Up to 825mA/140Vdc
Capacitance	<5 pFarads	<5 pFarads	At 1MHz, 0Vdc bias
Insulation Resistance	>1000 Mohm		At up to 200Vdc
Insertion Loss	<0.4dB (<0.8dB with over current versions)		Up to 100MHz, Cat5e spec
Return Loss	>20dB (>10dB with over current versions)		Up to 100MHz, Cat5e spec
Over Current Performance (Optional)			
Max Continuous Current	180 mAmps		2 hours minimum at 20°C
Reaction Time	<210 seconds		At 350mAmps, 20°C
Line Resistance	<4 ohms		Each line, 8 ohms total loop
Resistive Imbalance	<0.5 ohms		
Over Temperature Fail Short			
Balanced precision solder triggered copper ground bar			
Operating Temperature Range			
-40°C to +85°C			

Ordering Information (Part Numbers)

ST1 0 350 G N000 T

LEA Networks 1 Pin Series

Housing Color/Application

- 0 - Black/Standard
- 2 - Red/Special Services
- 3 - Orange/Bridge Lifter or xDSL
- 4 - Yellow/PBX or xDSL
- 5 - Green/Service Denial^A
- 6 - Blue/T1 or xDSL
- 7 - Violet/xDSL
- 8 - Grey/Continuity Only^B

Over Voltage Nominal Rating

- 000 - no protection
- 230 - 230 Volt, 5ESS
- 350 - 350 Volt, Standard

Test Access Ports

- T - with test ports
- N - without ports

Over Current Protection

- N000 - none
- R015 - with PTCR protection

A - "5" types have no electrical connection to equipment, they may be ordered as a grounding module, or with OSP line protection

B - "8" types have no protection inside, they only provide electrical connection between OSP line and equipment