

## Model: AL11 RJ11 Lightning Surge Protector

### Features:

- Three-Stage protection
- Failsafe architecture
- Anti-Dust IP50 Aluminum enclosure
- Gasketed cover and concealed mounting holes
- Removable terminal strips and modular RJ11 jacks
- Ground clamp provided on outside of enclosure
- Common mode protection – Line to Ground
- High-energy , High-speed capabilities
- Low shunt capacitance
- All 4-pins protected



### Applications:

- Computer Control Rooms
- Educational Institutions
- Sever Farms
- Commercial Offices
- Manufacturing Facilities
- Transmitter and Receiver Stations

### Companion Products:

- ADSL Modem
- Fax/Modem
- Home PNA
- Telephone
- Alarm System
- VoIP PABX
- Key System

The AL11 is designed to protect modems ,fax machines ,key systems, alarm systems, dialers, and Pay phones against lighting surges and electrical transients. This device uses a state-of-the-art multistage circuitry and will automatically reset after every electrical strike.



## Electrical / Surge Specification

Connectors	2 x Modular RJ-11 Female Jacks and 2 x Removable Terminal Strips
Protection Mode : All mode	Line-Ground Line-Line
Data Lines	Pin 3/4 Terminal Strip
Maximum Line voltage	170V
Clamping Voltage	190V
Series Resistance	4.7ohms
Capacitance	< 70 pF
Maximum Line Voltage	200mA
Nominal impulse discharge current(wave 8/20µs)	20kA
Single impulse discharge current (wave8/20µs)	25kA

## Grounding

Grounding	10-32 Stud with wire clamp
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## Mechanical Specification

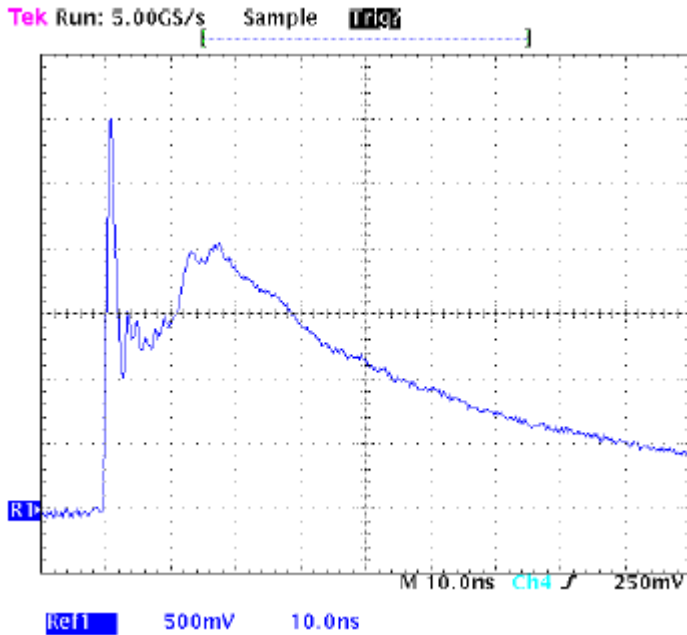
Enclosure	Anti-Dust Aluminum, IP50
Operating Temperature	-20 ° C - +70 ° C
Storage Temperature	-20 ° C - +65 ° C
Weight	120g
Dimensions	8.4(L) x8.1(W) * 2.2(H) cm

TheTVS diode array will meet the surge requirements of IEC 61000-4-2 (Formerly IEC 801-2), Level 4, "Human Body Model" for air and contact discharge.

Transient protection for data line	IEC61000-4-2(ESD) +- 15kV(air),+-8kV (contact) IEC61000-4-4(EFT) 40A (5/50ns) IEC61000-4-5(Lightning) 12A(8/20us)
Small SO-14 Surface mount package	Yes
Protects	Four I/O Lines
Working Voltages	5V,12V,15V and 24V
Low leakage current	Yes

Low operating and clamping voltages	Yes
Solid-state silicon avalanche technology	Yes

### ESD Pulse Waveform (IEC 61000-4-2)



### IEC 61000-4-2 Discharge Parameters

Level	First Peak Current (A)	Peak Current at 30 ns (A)	Peak Current at 60 ns (A)	Test Voltage (Contact Discharge) (kV)	Test Voltage (Air Discharge) (kV)
1	7.5	4	8	2	2
2	15	8	4	4	4
3	22.5	12	6	6	8
4	30	16	8	8	15