



Shireen's EtherGuardian products offer multilevel protection to Gigabit Ethernet devices. Offered in an outdoor weather resistant box, the unit can also be used indoors for protection of sensitive network equipment for electronic static discharges (ESD), cable discharge events (CDE), electrical fast transients (EFT) and lightning.

**Key Features:**

- Designed for 60V PoE devices (Standard 802.3af, Mode B).
- Solid-state silicon-avalanche diodes with internal TVS.
- Operates at low voltage, clamping voltage and capacitance.
- High speed data line ESD protection: IEC 61000-4-2,-4-4,-4-5.
- Broadband optimized Thyristors protection.
- Trigard Miniature 3-Pole gas discharge tubes.
- Overcurrent protection switch @ 72V max.
- RoHS compliant.
- 1000/100/10 BASE-T Shielded RJ45 Ethernet connector.
- PC Terminal Block - Spring-cage connector type for easy connect (PoE Mode A or B flexibility).



Electrical Specifications		
Low Capacitance TVS Diodes Array	ESD IEC 61000-4-2	15 kV (Air), 8kV (contact)
	EFT IEC 61000-4-4	40 A (5/50ns)
	Lightning IEC 61000-4-5	12 A (8/20µs)
	Peak Pulse Power (tp=8/20µs)	300 Watts
	Peak Pulse Current (tp=8/20µs)	12 A
	Reverse Stand-Off Voltage	5 V Max.
	Reverse Breakdown Voltage	6 V Min. (It=1mA)
	Reverse Leakage Current	5 µA (VRWM=5V, T=25°C)
	Forward Voltage	1.2 V (If=15mA)
	Clamping Voltage	12.5 V @ 1A, tp=8/20µs 17.5 V @ 5A, tp=8/20µs 25 V @ 12A, tp=8/20µs
Junction Capacitance	Typical: 3pF; Max. 5pF	
Protection Thyristors	Voltage Off State	58 VDRM @ 5 µs
	Voltage Breakover	77 Vs @ 100 V/µs
	Voltage On State	5 V
	Current Hold	150 mA
	Current Peak Pulse	400 A (8/20µs)
	Current Peak Pulse	100 A (8/1000µs)
	Capacitance (@1MHz, 2V Bias)	85pF max. 55pF min.
Miniature 3-Pole Gas Discharge Tube	DC Sparkover ±20%@100V/s	150 V
	Impulse Sparkover	350 V (100 V/µs) 500 V (1000 V/µs)
	Impulse Transverse Delay	<75 ns (100 V/µs)
	Insulation Resistance	>10 <sup>10</sup> Ω (100 V)
	Glow Voltage	~70 V (10 mA)
	Arc Voltage	~10 V (1 A)
	Capacitance	< 2pF (1 MHz)
	DC Holdover Voltage	< 150 ms (80 V)
	Impulse Discharge Current	>10 Operations (1000A, 8/20µs)
	Climatic Category (IEC 60068-1)	40/90/21
Overcurrent Protection Switch (Voltage: 72 V max., AC or DC)	Hold Rated Current	0.3 A @ 20°C Hold
	Current Ratings	0.3 A @ 20°C Hold, 0.6 A Trip
	Initial Resistant Values	0.88Ω @ 20°C Min., 1.33Ω Max.
	Time to Trip	3 Seconds @ 20°C 1.5A Max.
	1hr Post-Trip Resistance Std Trip	2.1 Ω @ 20°C Max.
	Tripped-State Power Dissipation	0.49W @ 20°C Nom., 0.77W Max.

Mechanical Specification	
Plastic case:	LEXAN 943A PC
Flame rating:	Medium viscosity flame retardant, UV-stabilized grade UL 94V-0
Operating Temperature:	-30 °C ~ +74 °C
Dimensions	Case: 99.7x113x44.5 mm(3.93x4.45x1.75 in); PCB: 38.1x63.5x15.8mm
Weight	0.275 Lbs (125g)