

Data Surge Protector SPD ALPU Outdoor Gigabit Ethernet/ PoE++ Shielded RJ45 SASD, GDT BABA Compliant, UL 497B

ALPU-F140-BA



Features

- BABA Compliant
- FDOT APL 620-004-012
- NEMA TS2 Tested and Compliant
- UL 497B
- Gigabit Ethernet/PoE++
- Patented Weatherized Wiring Grommet
- Full Mode Protection Including Shield to Ground
- Configurable Weep Holes
- Shielded RJ-45
- Conformal Coated PCBA
- Dielectric Lube to Weatherize RJ-45 Connections
- Pole or Wall Mount

Applications

- Traffic Control Systems
- PTZ Cameras, Lidar Systems
- Gigabit Ethernet/PoE++ Networks
- Telecommunications Base Stations
- IT & Data Centers
- Point-to-Point Links
- Control Lines and Sense Loops
- Edge AI Devices

Description

The Transtector ALPU-F140-BA data surge protector, approved under FDOT APL 620-004-012, is a high-performance outdoor surge protection device (SPD) engineered for Gigabit Ethernet and PoE++ data networks. Also known as a lightning protector, this SPD utilizes advanced silicon avalanche suppressor diode (SASD) and gas discharge tube (GDT) technology to deliver robust protection for mission-critical equipment. The ALPU-F140-BA safeguards against electrical transient surges caused by both external lightning strikes and internal switching events, ensuring system reliability and minimizing downtime. Designed to maintain full data throughput transparency, it features low clamping voltage and high surge absorption capability, making it ideal for sensitive network environments. FDOT APL listed and trusted in Intelligent Transportation Systems (ITS) and other infrastructure applications, this surge protector is in stock and available with same-day shipping from Transtector.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Connectors		Shielded RJ45		
Compatible Cables		Cat5/5e UTP/STP, Cat6/6A STP		
Data Protocols		Gigabit Ethernet/PoE++		
Data Rate			1,000	Mb/s
Characteristic Impedance		100		Ohms
Power over Ethernet Protocols			PoE++	
Vdc Rating (Data)		48	60	Vdc
PoE Power			100	W
PoE Current Per Pin			1.5	A

Surge Protection Specification

Description	Minimum	Typical	Maximum	Units
Surge Protection Technology		SASD, GDT		
Protected Pins		[1,2], [3,6], [4,5], [7,8]		

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Surge Protection Specification

Description	Minimum	Typical	Maximum	Units
Protection Modes	L-G, L-L, S-G			
10/000µs Surge Current				
L-G				
8/20µs Surge Current				
L-G			2	kA
L-L			0.1	kA
S-G			20	kA
Response Time			5	ns

Mechanical Specifications

Size

Length	4.5 in	[114.3 mm]
Width/Diameter	4 in	[101.6 mm]
Height	1.7 in	[43.18 mm]
Weight	0.33 lbs	[149.69 g]

Mechanical Specification Notes:

Environmental Specifications

Temperature

Operating Temperature	-40 to 65 deg C
Storage Temperature	-40 to 75 deg C
Environmental Protection Rating	IP65, NEMA 3R

Environmental Specification Notes:

Installation

Mount Type	Pole/Wall
Installation Hardware	Combination Drive Screw
Grounding	#10 - #12 AWG Ring Terminal

Compliance Certifications

BABA Compliant	Yes
UL Compliant	Yes
Certifications	UL 497B
	NEMA TS2
	FDOT APL 620-004-012

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Transtector Systems specializes in protection of highly sensitive, low voltage equipment through its patented, non-degrading silicon diode technology and custom filters. Our power quality expertise translates into a diverse product offering including AC, DC, and signal applications as well as integrated cabinets, power distribution panels and EMP hardened devices.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Data Surge Protector SPD ALPU Outdoor Gigabit Ethernet/PoE++ Shielded RJ45 SASD, GDT BABA Compliant, UL 497B ALPU-F140-BA](https://www.transtector.com/data-surge-protector-spd-alpu-outdoor-gigabit-alpu-f140-ba-p.aspx)

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ALPU-F140-BA CAD Drawing

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