

Introduction:

The Transtector ALPU-PTP-M is a solid state high-current high-speed data protection system ideal for 10/1000BT Gigabit communication networks. The ALPU-PTP-M is compatible for Motorola PTP Radios. When considering the need for lightning protection equipment, most fixed point to point radio manufacturers require the installation to include lightning protection equipment in accordance with their warranty and installation recommendations. A typical installation should include two Lightning Protection Units, one installed on the wall, tower or mast adjacent to the radio and one installed at the cable entry point of the building in which the network resides. To minimize the possibility of lightning damage, it is recommended that each PTP radio be fitted with an ALPU-PTP-M to protect from damage and the associated costs of replacing damaged radios and other connected equipment.

General Description:

The Transtector ALPU-PTP-M is ideal for protecting high speed 10/1000BT communications networks. The protection circuits utilize silicon avalanche diode technology. The protection circuit board is housed in an aluminum enclosure. The enclosure is an outdoor qualified NEMA 3R type with versatile mounting flanges. The ALPU-PTP-M features RJ45 protection circuits for gigabit Ethernet data (pins 1,2 & 3,6 & 4,5 & 7,8). The unit is intended to be wall mounted with an optional bracket available to allow a wide range of pole mount configurations. A dedicated ground point on the housing must be bonded to the nearest grounding system (or Master Ground bar) for proper surge protection functionality. The system wiring is installed with RJ-45 type connectors that can install directly into the chassis without having to cut or splice or route through awkward strain relief holes. The enclosure includes a built in cable retention feature for improved cable management using screw down clamps. In the unlikely event of surge protection self sacrifice, the protection elements will fail short to disrupt communication.

Electrical:

Connector Style: RJ45 Cat5 shielded 100 ohm
 Data Rate: 1000 Mb/s
 Maximum Continuous Operating Voltage(MCOV): 92 Vdc
 If installed in a Hazardous Location; MCOV = 85 Vdc
 Protected Pins: (1,2) (3,6) (4,5) & (7,8) pass through
 Impedance: 85 to 115 ohms
 Surge Suppression: 134 Vpeak @ 100 A, 10/1000 ms
 Suppression Response Time: < 5 ns
 Peak Surge Current: 100A @10/1000µS
 Nominal Live Current: 1 Amp
 Capacitance: <15pF

Environmental:

Operating/Storage Temperature: -40°C to +75°C
 Relative Humidity: 95% (non-condensing)

Mechanical:

Weight: 0.8 lbs (0.36 kg)
 Product Material: Die-Cast Aluminum

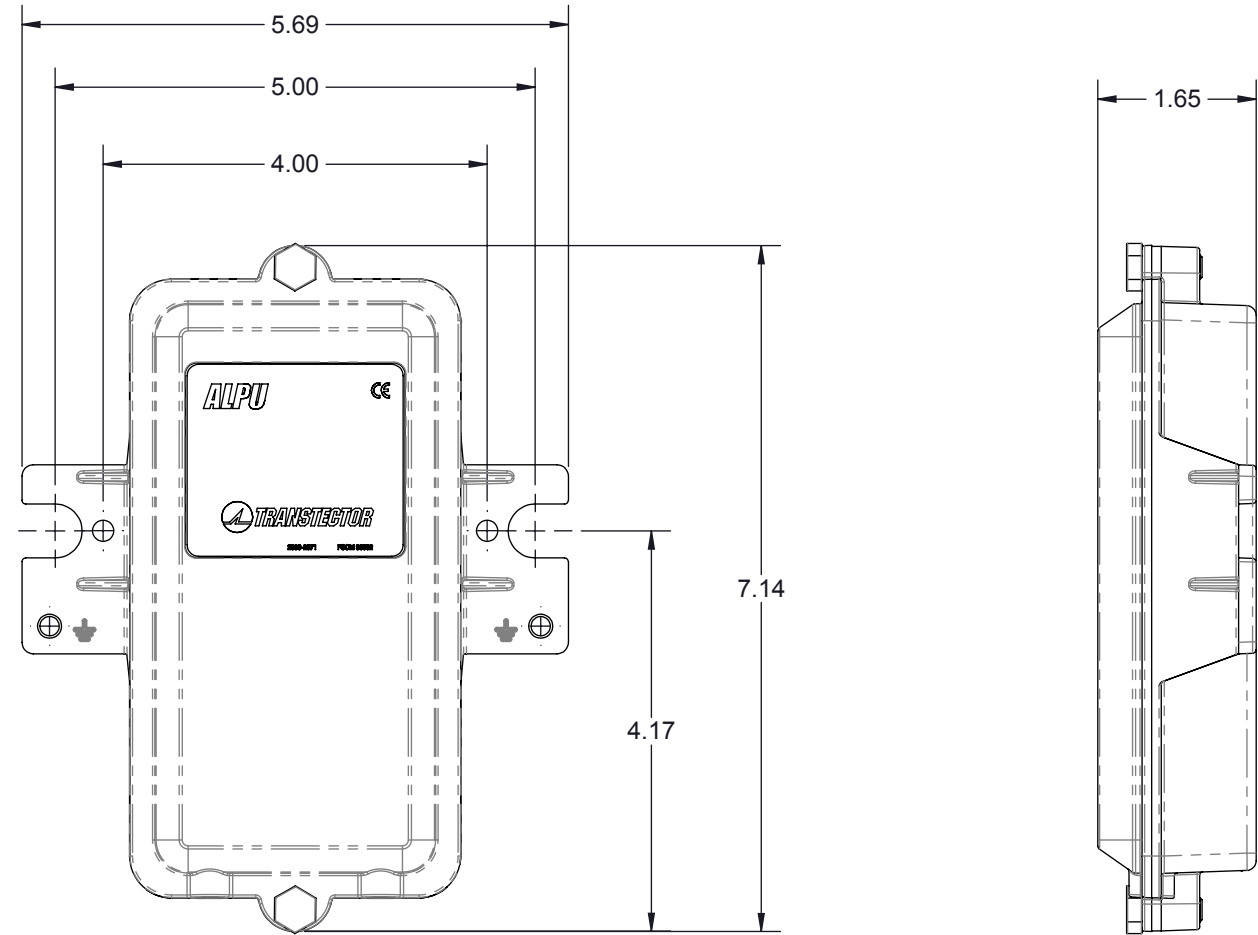
Applicable Industry Standards:

Bonding and Grounding: NEC 800.100 and 830.100
 Surge Suppression: GR-1089-2006
 10/100BT (Ethernet), 1000BT (Gigabit Ethernet) Communication Protocol: IEEE 802.3
 Power over Ethernet Protocol: IEEE 802.3af

Approvals:

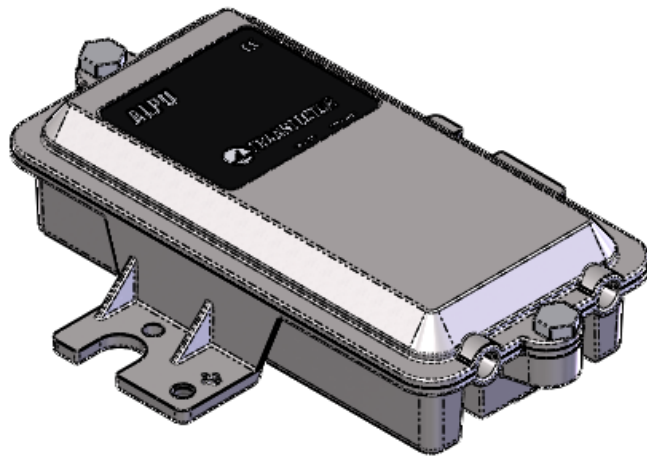
CE Mark Compliant
 IEC/ANSI/UL/CSA 60950 Compliant
 Hazardous Location Certifications: ETL Class I Div 2, Class I Zone 2, ATEX, IECEx (See Figure 1)

REVISIONS				
REV.	DESCRIPTION	ECN	DATE	APPROVED
D	REFER TO ECN	13360	08/13/15	KAD



ALPU GbE PoE	1101-959
Ratings: 85 Vdc, 4 A (1 A per line), IP54	
Class I Division 2 Groups A,B,C,D T8	
Class I Zone 2 AEx nA IIC T8 Gc	
Class I Zone 2 Ex nA IIC T8 Gc	
CE	ITS15ATEX48178X
II 3 G Ex nA IIC T8 Gc	IECEx ETL 15.0002X
-40°C ≤ Tamb ≤ +70°C	

Figure 1: Hazardous Locations



ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS TOLERANCES: FRACTIONS=± 1/32 .XX=± .01 ANGLES=± 1° .XXX=± .005 MATERIAL NOTED	DRAWN	HMB	DATE	2/14/13	 ALPU-PTP-M				
	ENG APPD	CAP		4/2/13					
	PRODUCT MGR	MLH		6/24/13					
	MARKETING APPD	LJ		6/27/13					
THIRD-ANGLE PROJECTION					TITLE ALPU-PTP-M				
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	SIZE	B	CAGE	30992	PART NUMBER	1101-959		REV	D
	SCALE	1:2	PROD CAT	DST	DOCUMENT NAME	1101-959-C		SHEET	1 OF 1
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