

# ALPU

## Specifications



ALPU-L130, ALPU-F140

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## Table of Contents

Introduction.....	3
Features and Benefits .....	3
Grounding.....	3
Specifications .....	4
Dimensions.....	5
Kit Contents.....	5
Mechanical Features.....	6
Environmental Protection .....	7

## Introduction

The ALPU line of products provides reliable Gigabit Ethernet data protection combined with the latest Power over Ethernet protocols and unmatched ease of installation. Customer-centric design has created a product line that will reduce installation time and expense on the job site while giving your system the protection performance it needs.

## Features and Benefits

Designed with the customers' voice in mind, the ALPU line of data protectors offers best in class features for mounting configuration, electrical performance and environmental withstand.

- Single-tool design means reduced installation time and fewer tools for the installer to carry.
- Integral pole mount slot allows the installer to hang a hose clamp or tie wrap from the unit which frees up an extra hand to manage tools or positioning the unit on the pole. Single hose clamp design reduces installation time and expense.
- Overmolded grommet feature prevents possible loss of the grommet or dropping from an inconvenient location. Grommet may also be configured to provide dedicated water/condensation drain holes if desirable based on installation environment.
- Concealed external screw holes maintain the environmental characteristics of the product while providing the added benefit of reduced panel space consumption and tamper resistance when the lid is closed.
- Individual inline cable entry points prevent unnecessary strain on the connectors and reduces packet loss from cross-talk generated by compressed cables bending through a single entry design.
- Lightning protection circuits that utilize the high energy dissipation characteristics of gas discharge tube (GDT) technology, fast response time and repeatable low clamping characteristics of silicon avalanche suppression diodes (SASD, Fit model only).
- Low insertion loss and high return loss to support full Gigabit Ethernet bandwidth with zero frame loss. Compatible with Category 5, Category 5e and Category 6 cable.

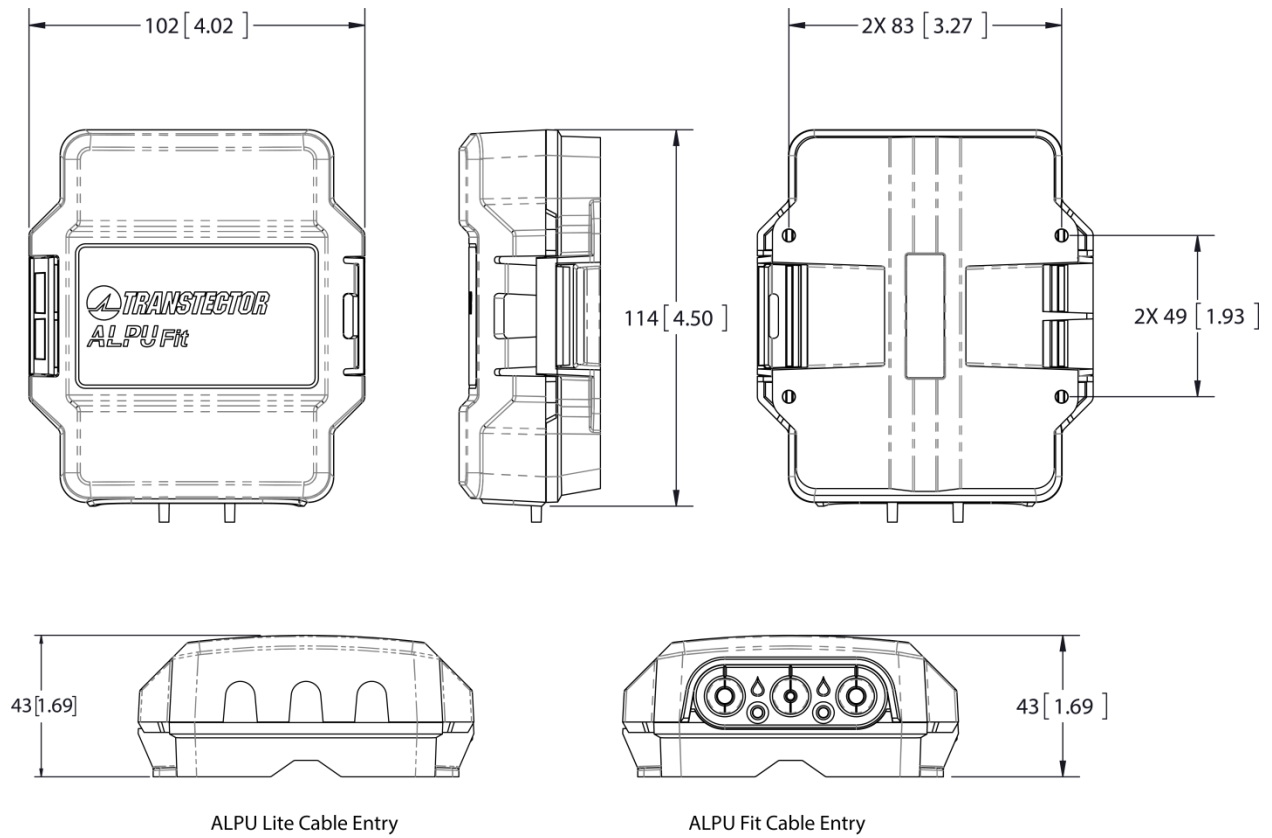
## Grounding

Unit shall be properly grounded per the installation instructions. Failure to do so will result in voided warranty and possible equipment damage.

## Specifications

	ALPU Lite	ALPU Fit
Part Number	ALPU-L130	ALPU-F140
<b>Electrical</b>		
Data Rate	1 Gb/s (Gigabit Ethernet)	1 Gb/s (Gigabit Ethernet)
Protocols	GbE, PoE+	GbE, PoE+, PoE++
Characteristic Impedance	100 $\Omega$	100 $\Omega$
Nominal PoE Voltage	48 Vdc	48 Vdc
Maximum PoE Voltage	60 Vdc	60 Vdc
Maximum PoE Current (per pin)	600 mA	1.5 A
Maximum PoE Power	51W	100W
Surge Suppression Technology	Gas Discharge Tube	Hybrid Gas Discharge Tube and Silicon Avalanche Diode
Pins Protected	[1,2] [3,6] [4,5] [7,8] {Shield}	[1,2] [3,6] [4,5] [7,8] {Shield}
Protection Modes	Line to Ground Shield to Ground	Line to Line Line to Ground Shield to Ground
Maximum Surge Current ( <i>per pair</i> ) <i>Line to Line 8/20 <math>\mu</math>s</i>	N/A	100 A
Maximum Surge Current ( <i>per pin</i> ) <i>Line to Ground 8/20 <math>\mu</math>s</i>	1 kA	2 kA
Maximum Surge Current <i>Shield to Ground 8/20 <math>\mu</math>s</i>	20 kA	20 kA
Response Time	< 75 ns	< 5 ns
<b>Mechanical</b>		
Connectors	RJ45 Cat5e Shielded	RJ45 Cat5e Shielded
Weight	0.33 lbs (150 g)	0.33 lbs (150 g)
Dimensions (HxWxD)	4.5" x 4.0" x 1.7" (113mm x 102mm x 43mm)	4.5" x 4.0" x 1.7" (113mm x 102mm x 43mm)
<b>Environmental</b>		
Enclosure Protection Ratings	IP23	IP65 NEMA 3R
Operating Temperature	-40°C to +65°C	-40°C to +65°C
Storage Temperature	-40°C to +75°C	-40°C to +75°C
Corrosion Protection	No	Yes
UV Resistance	Yes	Yes
Flammability	UL94V-0	UL94V-0
Mean Time Between Failure	>1,000,000 hrs	>1,000,000 hrs
<b>Installation</b>		
Mounting	Integral Pole ( $\geq \varnothing 1"$ ) / Wall Mounting Features	Integral Pole ( $\geq \varnothing 1"$ ) / Wall Mounting Features
Installation Hardware	Combination Drive Screw	Combination Drive Screw
Grounding	Ring Terminal for M5 (#10) Screw	Ring Terminal for M5 (#10) Screw
<b>Regulatory Compliance</b>		
UL Certification	497B	497B
IEC Certification	IEC 60950 IEC 61000-4-5	IEC 60950 IEC 61000-4-5
CE	Compliant	Compliant
RoHS	Compliant	Compliant
<b>Warranty</b>		
Warranty	1 year	3 year

## Dimensions

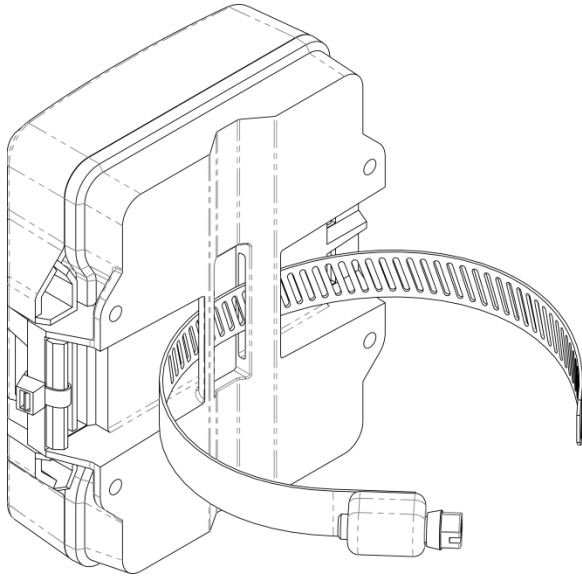


## Kit Contents

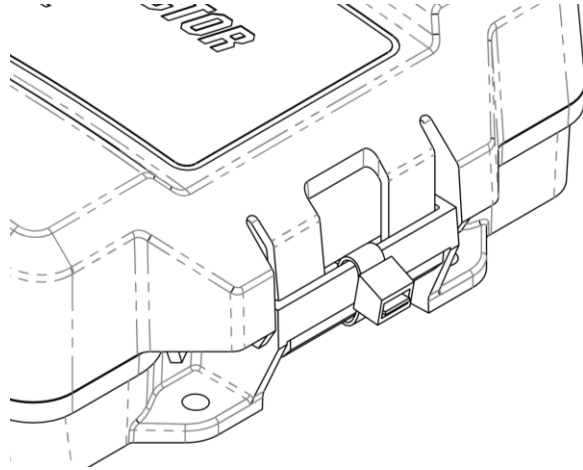
	ALPU Lite	ALPU Fit
Part Number	ALPU-L130	ALPU-F140
Installation Instructions	Yes	Yes
Dielectric Grease	No	Yes

## Mechanical Features

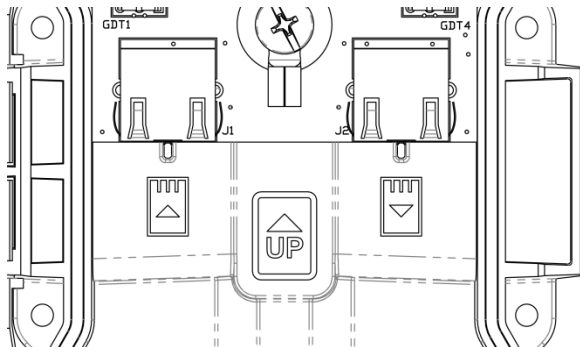
Integral hose clamp slot eases installation by allowing a hose clamp (not provided) to rest on the unit while positioning unit on pole.



Open slot in latch region allows for added security measures when secured with a tie wrap (ALPU Fit model only).

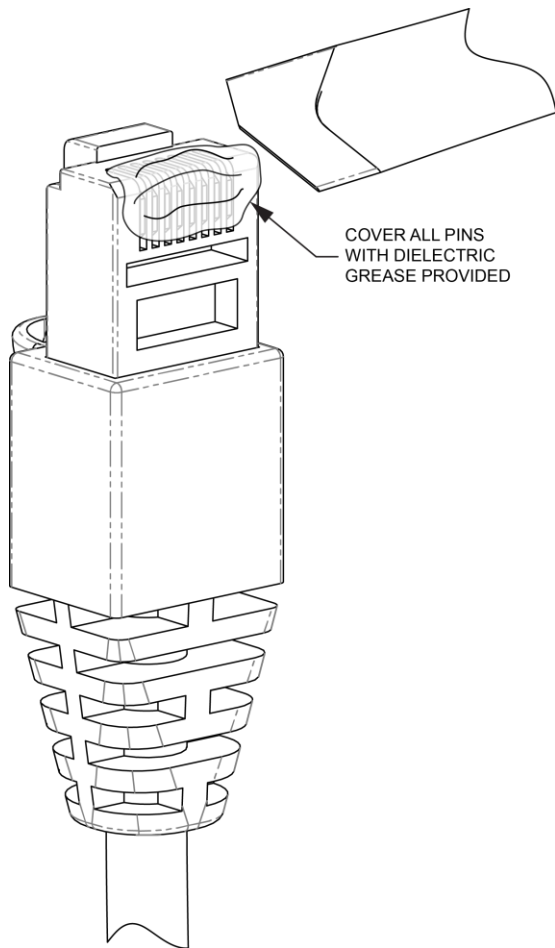


Icons in center of open unit indicate mounting orientation (up arrow with “UP” diagram), unprotected signal entry (up arrow connector diagram) and protected signal transmitted out (down arrow connector diagram).

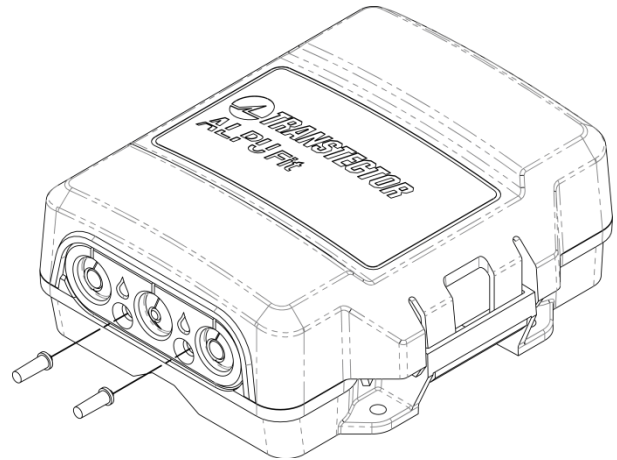


## Environmental Protection

To protect the RJ45 connections from corrosion, apply enough of the provided dielectric grease to ensure coverage across all pin contact areas on both RJ45 plugs prior to inserting for final installation (ALPU Fit model only).



Tool-less, removable drain plugs on sealing grommet provide installers an easy means of allowing condensation buildup to escape (ALPU Fit model only).



DRAWN TREVOR TOLLEFSOL	DATE 4/15/15
CHECKED DAVE MAY	DATE 5/13/15
ENGRG APPD ERIC NGUYEN	DATE 5/13/15
PROJ APPD DAN REBECK	DATE 5/13/15
APPROVED DAVE ROWLEY	DATE 5/14/15
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