

Product Specification

Industrial IEEE 802.3at High Power over Ethernet Splitter

IPOE-162S

Version 2.0

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Change History:

Revision:	Date:	Author:	Change List
Version 1.0	2011/11/2	Bryant Wu	Initial Release
Version 2.0	2014/9/4	Bryant Wu	PoE IC changes to LTC4278

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1. PRODUCT DESCRIPTION



New Industrial IEEE 802.3at High Power over Ethernet Splitter and its PLANET model name is IPOE-162S. The following Key features of IPOE-162S:

- IEEE 802.3at Power over Ethernet standard compliant
- 12V / 24V DC power output through DIP switch
- Passive 10/100/1000Mbps duplex mode support
- -40 to 75 Degree C Operating Temperature
- IP30 Metal Case / DIN Rail and Wall Mount Design
- Free Fall, Shock, Vibration Industrial Stability

The IPOE-162S is an Industrial IEEE 802.3at Gigabit Power over Ethernet splitter which split the 52~56V DC over the Ethernet cable into 12V DC or 24V DC power output. Work with the IEEE 802.3at Power Source Equipment (PSE), the IPOE-162S frees the device deployment from restrictions due to power outlet locations, which eliminates the costs for additional AC wiring and reduces the installation time.

Highly Convenient and Feasible Industrial Robust Splitter

As we know the temperature in many places and countries of the world are lower than -10 degrees C and PLANET IPOE-162S Industrial Ethernet Splitter can work with wide temperature operation environment ranging from -40 up to 75 degrees C, therefore the PLANET IPOE-162S will be the ideal product for co-working with Industrial High Power Injector which can feed the power to Non-PoE devices on those harsh environments.

The PLANET Industrial IEEE 802.3at Gigabit Power over Ethernet Injector devices like - IGTP-80xT series media converter. It inserts DC Voltage into Cat.5/5e/6 cable and allows the cable between the Splitter (IPOE-162S) to transfer data and power simultaneously. The maximum distance between the Industrial High Power Injector and Splitter (IPOE-162S) is 100 meters. PLANET IPOE-162S also supports passive 10/100/1000Mbps Ethernet connection ability.

Cost Effective and Easy Cabling Installation

With IEEE 802.3at Gigabit High Power over Ethernet devices installed, the system administrator only has to use one single RJ45 Ethernet cable to carry both power and data to each device. Besides, to connect through the Industrial High Power PoE Injector with IPOE-162S, you could also have benefits including cost saving, easier for networking planning and higher reliability.

2. PRODUCT FEATURES

- **Interface**
 - 2-Port RJ45 interfaces
 - 1-Port **PoE Power+ Data** input
 - 1-Port **Data** output
 - 2 DC out (4 Pin Terminal Block)
- **Power over Ethernet Splitter**
 - Comply with IEEE 802.3at High Power over Ethernet, PD
 - Splits the 52~56V DC power over RJ45 Ethernet cable into DC 12V / 24V output
 - Up to 1 non-IEEE 802.3at PoE device powered
 - Auto-detect of PoE IEEE 802.3at equipment, protect devices from being damaged by incorrect installation
 - Adjustable two different output voltage options (12V / 2A, 24V / 1A) to fit various devices
 - Distance up to 100 meters
- **Industrial Case / Installation**
 - IP30 metal case protection
 - DIN Rail and Wall Mount Design
 - Supports EFT protection 6000 VDC for power line
 - Supports 6000 VDC Ethernet ESD protection
 - -40 to 75 degrees C operating temperature
- **Standard Compliance**
 - IEEE 802.3 10Base-T
 - IEEE 802.3u 100Base-TX
 - IEEE 802.3ab 1000Base-T
 - IEEE 802.3at High Power over Ethernet standard
 - FCC Part 15 Class A, CE

3. PRODUCT SPECIFICATIONS

3.1 MAIN COMPONENT

PoE Power IC: LINEAR LTC4278

3.2 FUNCTION SPECIFICATIONS

Product		IPOE-162S
Hardware Specifications		
Interface	“PoE (Power + Data)” Input Port	1 x RJ45 10/100/1000Base-T
	“Data” Out Port	1 x RJ45 10/100/1000Base-T
	DC Out Plug Connector	1x 4-Pin terminal block
LED Indicator		System: Power Ready x 1 (Green)
Network Cable		10Base-T: 4-Pair UTP Cat. 5, up to 100m (328ft) 100Base-TX: 2-Pair UTP Cat. 3, 4, 5, up to 100m (328ft) 1000Base-T: 2-Pair UTP Cat. 5, 5e, 6 up to 100m (328ft) EIA/TIA- 568 100-ohm STP (100m)
Data Rate		10/100/1000Mbps (vary on Ethernet device attached)
DIP Switch		12V DC / 24V DC output voltage
Power Input		802.3at PoE 52~56V DC
Power over Ethernet		
PoE Standard		IEEE 802.3at High Power over Ethernet, Powered Device
Number of device can be powered		1 or 2 (Vary on Devices Power Requirement, DC1 + DC2 can not over the 25.5Watts)
Power Output		12V / 24V DC, Max 2A (adjustable)
Standards Conformance		
Standards Compliance		IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3at High Power over Ethernet
Stability Testing		IEC60068-2-32(Free fall) IEC60068-2-27(Shock) IEC60068-2-6(Vibration)

3.3 PHYSICAL SPECIFICATIONS:

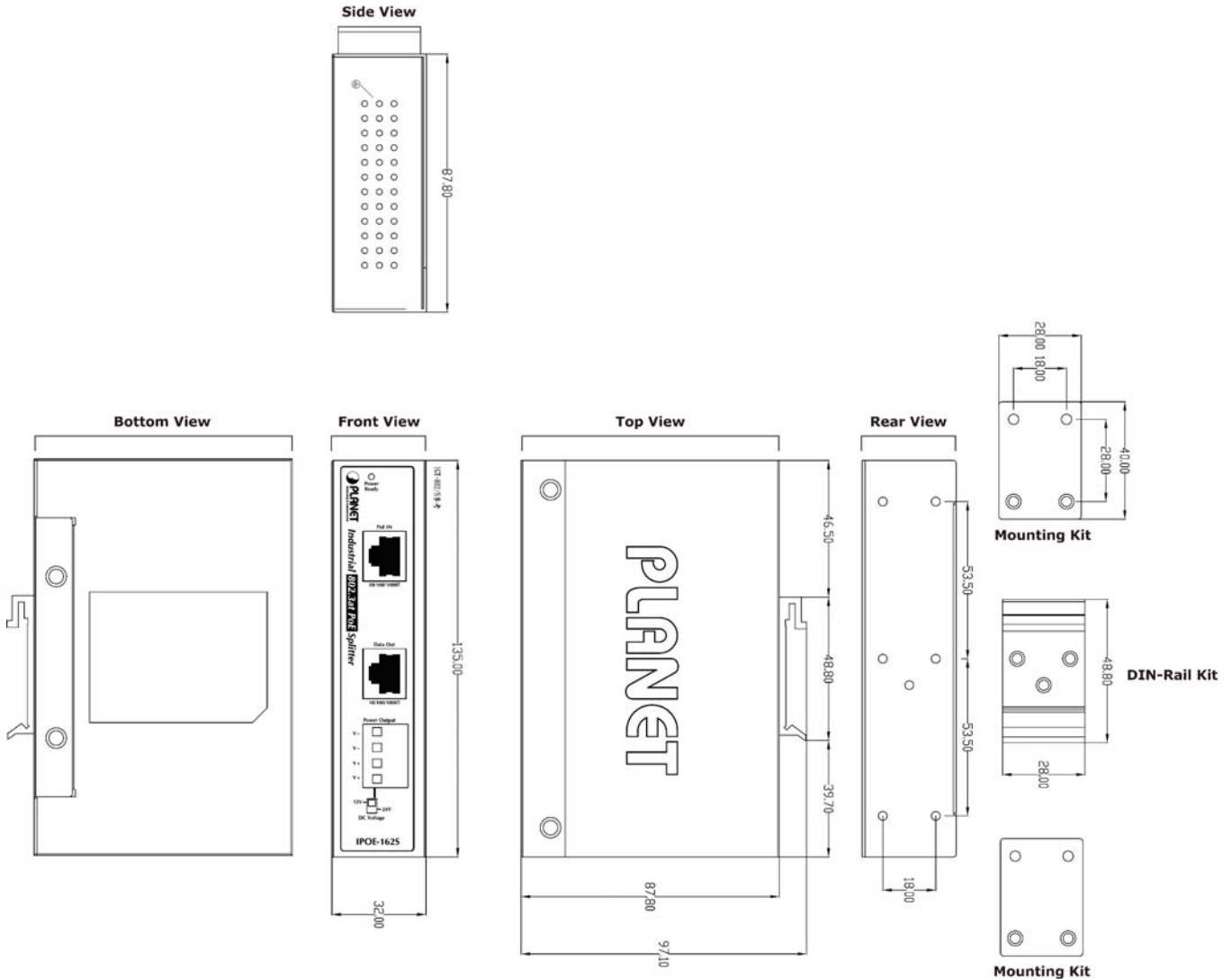
Dimensions:

135mm x 87.8mm x 32mm (W x D x H)

Weight:

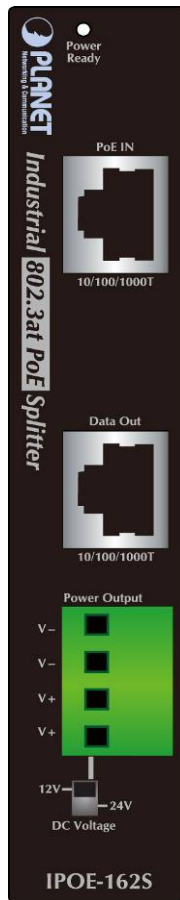
421g

Physical Dimension:



Dimensions (unit = mm)

Front Panel:



LED Definition:

LED	Color	Function
Power Ready	Green	Lights to indicate the port is receiving 56V DC in-line power and ready for output.

3.4 ENVIRONMENTAL SPECIFICATIONS

Operating:

- Temperature:** -40 ~ 75 degrees C
- Relative Humidity:** 5% ~ 95% (non-condensing)

Storage:

- Temperature:** -40 ~ 85 degrees C
- Relative Humidity:** 5% ~ 95% (non-condensing)

3.5 ELECTRICAL SPECIFICATIONS

Output Voltage:

- 12V DC, 2A max
- 24V DC, 1A max

3.6 REGULATORY COMPLIANCE

FCC Part 15 Class A, CE

EMI:

EN 55022 CLASS A:2006

EN61000-3-2:2006

EN61000-3-3: 1995+1A:2001+A2:2005

EMS:

EN 55024:1998+A1:2001+A2:2003

IEC 61000-4-2:2001

IEC 61000-4-3:2008

IEC 61000-4-4:2004

IEC 61000-4-5:2005

IEC 61000-4-6:2008

IEC 61000-4-8:2001

IEC 61000-4-11:2004

3.7 REALIABILITY

MTBF > 100,000Hrs

IEC60068-2-32 (Free fall)

IEC60068-2-27 (Shock)

IEC60068-2-6 (Vibration)

3.8 BASIC PACKAGING

- The Industrial IEEE 802.3at Gigabit High Power over Ethernet Splitter x 1
- User's Manual x 1
- DIN Rail Kit x 1
- Wall Mount Kit x 1

3.9 PACKING DIMENSION

Dimension: 410mm (W) x 310mm (D) x 265mm (H)

Weight: 10.4kg (Gross weight)
18pcs in one carton