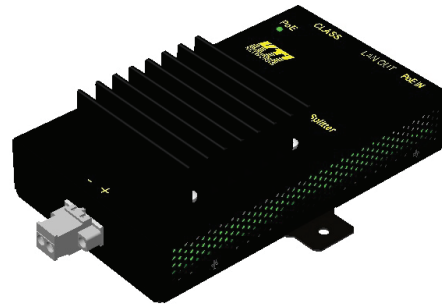




# KPW-BTPD



**Preliminary**



## Industrial IEEE 802.3bt Splitter and Power Converters

### Product Highlights:

- IEEE 802.3bt compliance
- KTI PoE++ support
- Variety of model options
- Surge immunity up to 4KV

### PoE Type 3 and Type 4 Power:

PoE		IEEE 802.3bt	
Type	Class	PSE *1	PD *2
3	5	45	40
3	6	60	51
4	7	75	62
4	8	90	71.3

PoE		KTI PoE++	
Type	Class	PSE *1	PD *2
3	5	50	39
3	6	74	53
4	7	90	70
4	8	128	90

\* 1. The maximum output at the PSE end  
 \* 2. The minimum input received at the PD end in the worst cast under maximal PSE output

KTI Network's KPW-BTPD is a state-of-art PoE splitter that integrates both the latest approved IEEE 802.3bt PoE standard and KTI PoE++ technology. It supports PoE incapable network device by just using a single twisted pair cable for both power and data transmission.

Further, the splitter has built-in a DC-DC power converter that converts the power input over network cable to a lower voltage output for local use. The splitter series has two voltage options, 12VDC and 24VDC and two power levels, 60W and 90W each for selection. The splitter is also equipped with DIP SW that allows user to select one from nine different classes for demanding power from a remote PoE switched port or mid-span injector. This feature can support efficient power management at the advanced PSE side.

For industrial applications, the splitters can support panel mounting and come with standard bracket for Din-Rail mounting. To enhance application safety, the splitters are featured short-circuit protection, low voltage lock out, inrush current limit, thermal protection and high surge immunity rating.

### Key Features:

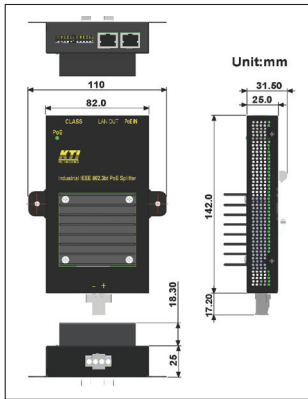
- IEEE 802.3bt, IEEE 802.3at and 802.3af PoE compliance
- Support KTI high power PoE++ PSE devices
- Supports 10BASE-T, 100BASE-TX, and 1000BASE-T
- Supports Alternative A or Alternative B PoE input over Cat.5/6
- Provides PD class selection SW for supporting power management at PSE side
- Embedded with isolated and high-efficient DC-DC power converter
- Protections: short circuit/over power/over current/over temperature
- High surge immunity up to 4KV

### Specifications:

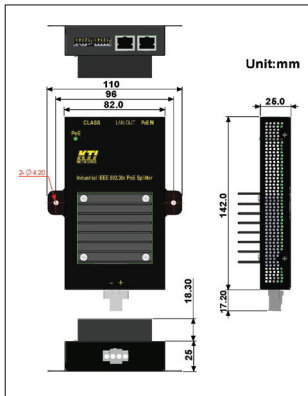
Standard	IEEE 802.3 10BASE-T, 100BASE-TX, 1000BASE-T
PoE In Jack	Shielded RJ-45 10BASE-T, 100BASE-TX, 1000BASE-T support Power pins – Pin1/2/3/6 and Pin4/5/7/8 (support both) LAN cable - Cat.5 or better
PoE Standard	IEEE 802.3af Type 1, IEEE 802.3at Type 2, IEEE 802.3bt Type 3 & 4
Power Class	Type 1 Class 0 ~ 3, Type 2 Class 4, Type 3 Class 5/6, Type 4 Class 7/8 (by DIP SW setting)
PoE Input Voltage	36 ~ 57VDC
LAN Out Jack	Shielded RJ-45 10BASE-T, 100BASE-TX, 1000BASE-T std. LAN cable - Cat.5 or better
DC Output	2P European Terminal block – DC+/DC-
DC Wire	12 ~ 22 AWG (1 meter max.)
LED Display	PoE input status



**DIN-Rail Dimension**



**Panel Dimension**



**Related Products:**

**KTI PoE++ PSE Devices**  
 KPOE-200  
 Industrial High-Power Single-Port  
 PoE++ Mid-span Injector

KGC-261-DP/I  
 IEC 61850-3 IEEE 1613 Managed  
 Media Converters with PoE

KGC-261-DP/G  
 Industrial Managed Media  
 Converters with PoE



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Isolation	RJ-45 vs. DC OUT lines, RJ-45 vs. Frame ground, DC OUT lines vs. Frame ground	
Protection	Auto-recovery for short circuit, OCP, OPP, OTP	
Housing	Enclosed metal with no fan	
Dimension	110 x 43.3 x 142 mm (LxWxH)	
Mounting Support	DIN-Rail, Panel mounting	
Environmental	Operating Temperature:	-40°C ~ +70°C
	Storage Temperature:	-40°C ~ +85°C
	Relative Humidity:	5% ~ 95% non-condensing

Derating	Model	Still air	Air flow 1m/s
	KPW-BTPD-12V60W	100% (45°C), 75% (55°C)	100% (50°C), 75% (60°C), 55% (70°C)
	KPW-BTPD-12V90W	80% (40°C), 60% (50°C)	100% (50°C), 80% (60°C), 60% (68°C)
	KPW-BTPD-24V60W	100% (40°C), 80% (50°C), 50% (70°C)	No derating
	KPW-BTPD-24V90W	80% (35°C), 60% (45°C)	100% (50°C), 80% (60°C), 60% (68°C)

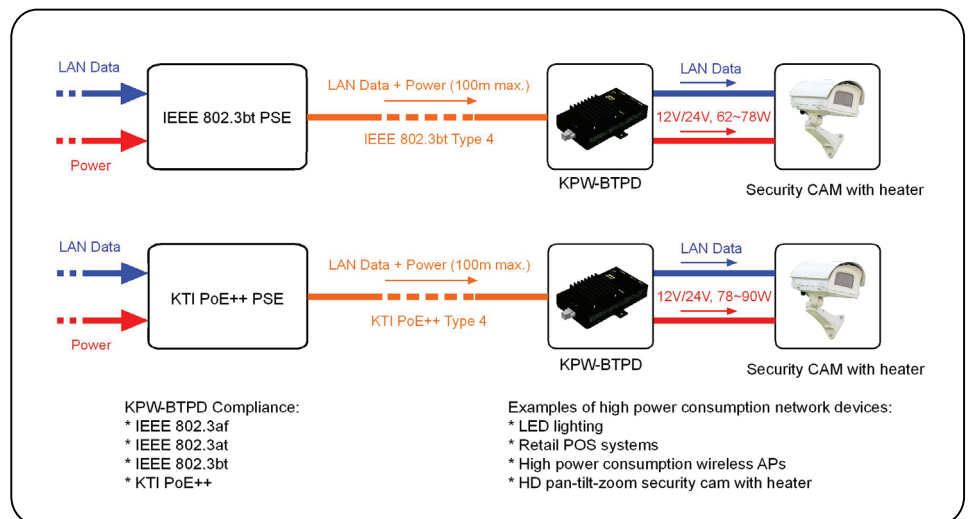
Approval FCC Class A, CE Mark Class A, IEC60950-1 safety  
 IEC 60068-2-27 Shock, IEC 60068-2-64 Vibration

**Ordering Information:**

Model	DC OUT	
	Voltage	Rated Watts*
KPW-BTPD-12V60W	12VDC	60W max.
KPW-BTPD-12V90W	12VDC	90W max.
KPW-BTPD-24V60W	24VDC	60W max.
KPW-BTPD-24V90W	24VDC	90W max.

\* Connecting IEEE 802.3bt DC OUT max. = Rated Watts x 87%  
 \* Connecting KTI PoE++ DC OUT max. = Rated Watts

**Applications:**



KPW-BTPD Compliance:  
 \* IEEE 802.3af  
 \* IEEE 802.3at  
 \* IEEE 802.3bt  
 \* KTI PoE++

Examples of high power consumption network devices:  
 \* LED lighting  
 \* Retail POS systems  
 \* High power consumption wireless APs  
 \* HD pan-tilt-zoom security cam with heater