



# KPW-T4SP



## Industrial High Power PoE++ Splitter

KTI Network's KPW-T4SP is a high power PoE++ splitter which integrates Power over Ethernet (PoE) technology to PoE incapable network device by just using a single twisted pair cable for both power and data transaction. It is a high power splitter that is able to receive a power up to 128W in voltage range of 36-57V over Ethernet twisted cable from IEEE 802.3af PoE, 802.3at PoE+ and proprietary PoE++ PSE end over Ethernet twisted cable. The splitter is 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 supports efficient power management at the advanced PSE side.

For industrial applications, the splitter is also equipped with brackets for Din-Rail mounting and panel mounting. To enhance application safety, the splitter is featured short-circuit protection, low voltage lock out, inrush current limit and thermal protection.

The splitter comes with four optional DC-DC power converters which convert PoE voltage to a matched voltage and supply power for the local end device. The converters have two voltage options of 12V and 24V and two power levels of 60W and 90W for selection. For easier, cost-effective PoE network installation, the splitter and DC-DC power converters are your best solution to protect original investment.

### Key Features:

- Enables PoE incapable network device with PoE capability
- IEEE 802.3at PoE+ and 802.3af PoE compliance
- Supports proprietary high power PoE++ up to 128W
- Supports 10BASE-T, 100BASE-TX, and 1000BASE-T
- Supports Alternative A or Alternative B PoE input over Cat.5/6
- Provides power class selection DIP for demanding power from PSE
- Supports Type 1 PSE classification and Type 2 PSE 2-event classification
- Provides solution with isolated and high-efficient DC-DC power converters

### Specifications:

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



|                  |  |
|------------------|--|
| LED Display      | PoE input status   |
| DIP SW           | Power class selection for PSE classification   |
| Housing          | Enclosed metal with no fan   |
| Dimension        | 85 x 73 x 24 mm (LxWxH)  |
| Mounting Support | DIN-Rail, Panel mounting   |
| Environmental    | Operating temperature: -30°C ~ +70°C<br>Storage temperature: -30°C ~ +85°C<br>Relative Humidity: 5% ~ 95% non-condensing |
| Approval         | FCC Class A, CE Mark Class A, IEC60950-1 safety<br>IEC 60068-2-27 Shock, IEC 60068-2-64 Vibration                        |

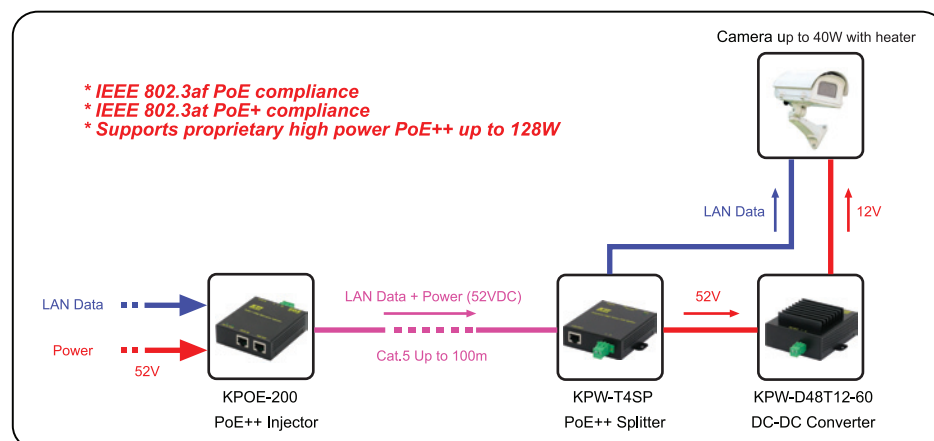
### Reference:

#### PSE Output vs. Splitter Input

| PD Type | Class | PSE OUT | Splitter IN min.*2 |
|---------|-------|---------|--------------------|
| 1       | 0     | 15.4W   | 12.95W             |
| 1       | 1     | 4W      | 3.84W              |
| 1       | 2     | 7W      | 6.49W              |
| 1       | 3     | 15.4W   | 12.95W             |
| 2       | 4     | 32W     | 25.5W              |
| 3*1     | 5     | 50W     | 38.7W              |
| 3*1     | 6     | 74W     | 52.7W              |
| 4*1     | 7     | 90W     | 70W                |
| 4*1     | 8     | 128W    | 90W                |

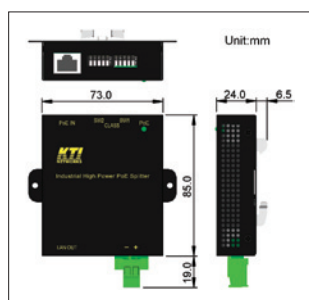
\*1: PD Types & associated classes are proprietary PoE++ std.  
\*2: The power received at Splitter end in worst case

### Applications:

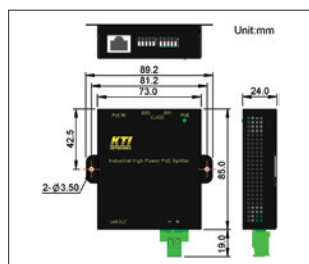


### Optional DC-DC Power Converters:

|               |   |
|---------------|---|
| KPW-D48T12-60 | 60W Isolated DC-DC Power Converters, Input 44 ~ 60VAC, Output 12VDC |
| KPW-D48T12-90 | 90W Isolated DC-DC Power Converters, Input 36 ~ 70VAC, Output 12VDC |
| KPW-D48T24-60 | 60W Isolated DC-DC Power Converters, Input 44 ~ 60VAC, Output 24VDC |
| KPW-D48T24-90 | 90W Isolated DC-DC Power Converters, Input 44 ~ 70VAC, Output 24VDC |



KPW-T4SP DIN-Rail Dimension



KPW-T4SP Panel Dimension



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