

# FOCD-H-2TGPS-USFP

**MINI INDUSTRIAL 1-PORT 100/1000X SFP TO 2-PORT 10/100/1000T 30W 802.3AT POE+ MEDIA CONVERTER WITH 12V BOOSTER**



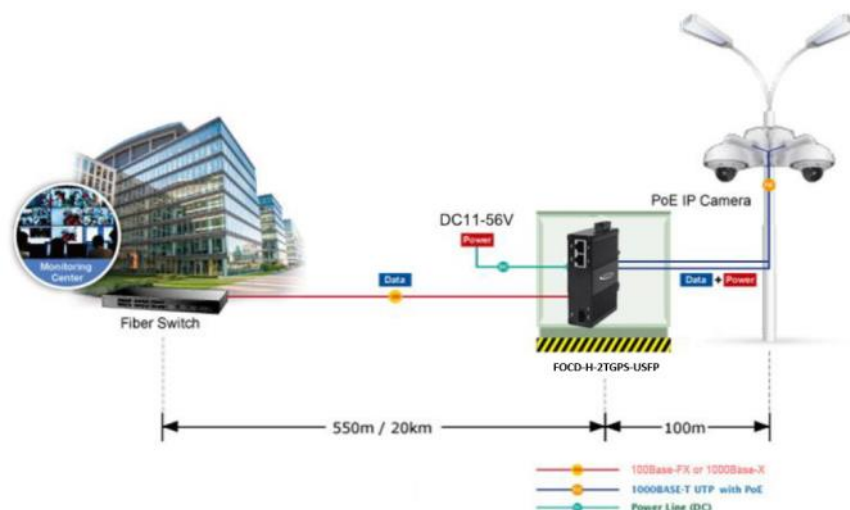
## Description

CXR **FOCD-H-2TGPS-USFP** with 2-Port 10/100/1000Base-T and 1-Port 100/1000Base-X SFP that provides stable and reliable Ethernet transmission with dual power input design, offers redundant mechanisms for critical applications that need always-on connections. It also operates at standard operating temperature range from -40°C to 80°C. Housed in rugged DIN rail or wall mountable IP40 enclosures, this converter is a perfect choice for harsh environments, such as industrial networking, intelligent transportation systems (ITS) and is also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications.

To facilitate the 802.3at PoE+ usage with the commonly-used 11-56V DC power input for transportation and industrial-level applications, the **FOCD-H-2TGPS-USFP** adopts 12-48V DC to 48V DC power boost technology to solve power source issue but does not require special power supplies. Its wide-ranging voltages design is suitable for worldwide operability with high availability applications requiring dual or backup power inputs.

It is a new generation Ethernet Media converter with 802.3at Power over Ethernet Plus (PoE+) injector function to deliver up to 30 watts of power output and high data transmission speed to PDs (powered devices) installed in a remote area where sufficient and reliable power input is required. It is positioning in the broadband network intervention market, to offer and realize Ethernet data exchange, convergence and long distance optical transmission with efficient bandwidth and reliable fiber optic network solutions for users. The industrial converter complies with various characteristics such as mini size, no fan, low power consumption, high reliability and stability.

## Application Diagram



2 X

**10/100/1000BTX RJ45 POE 30W PORT**

**1 X 100/1000BASE-X SFP PORT**

**11~56VDC wide range power input with power booster function**

**Auto-MDIX**

**ELECTRIC 6KV SURGE PROTECTION**

**POWER REDUNDANCY**

## Specifications

|   |  |
|---|--|
| <b>Physical Port</b>  |  |
| RJ45 port and speed   | 2 x 10/100/1000Base-T  |
| Fiber port and speed  | 1 x 100/1000Base-X SFP   |
| <b>Parameters</b>   |  |
| Ethernet Standards  | IEEE 802.3 Ethernet<br>IEEE 802.3u Fast Ethernet<br>IEEE 802.3ab Gigabit Ethernet<br>IEEE 802.3z Gigabit Ethernet over Fiber Optic<br>IEEE 802.3x Flow Control<br>IEEE 802.3az Energy Efficient Ethernet (EEE) |
| Packet buffer   | 1Mbits   |
| Maximum packet length   | Up to 9K bytes   |
| Mac address table   | 1Mbits   |
| Transmission mode   | Store and forward (full/half duplex mode)  |
| Exchange property   | Delay time : <7μs<br>Switch fabric : 12Gbps<br>Throughput (packet per second) :<br>8.93Mpps@64Bytes  |
| <b>PoE</b>  |  |
| PoE standard  | IEEE 802.3af Power over Ethernet<br>IEEE 802.3at Power over Ethernet Plus  |
| PoE Power Voltage   | DC48V Max. Output power 30W  |
| PoE RJ45 Pins   | Positive : 4,5 (+) and Negative : 7,8 (-)  |
| <b>LED Indicator</b>  |  |
| Power<br>PoE<br>RJ45<br>Fiber   | Connect-Always-On*<br>PD Plug ON status<br>Link/Act : connect-always - data exchange blinking<br>Link/Act : connect-always - data exchange blinking  |
| <b>Power Information</b>  |  |
| Power access mode<br>Redundant power input<br>Overload protection<br>Power reverse<br>Power consumption | Phoenix terminal<br>DC11-56V<br>Yes<br>Support<br>5W Max. (PoE not activated)  |

## Specifications

|                               |   |
|-------------------------------|---|
| <b>Physical Property</b>      |   |
| Protection grade              | IP40 aluminium housing  |
| Cooling Mode                  | Natural cooling. No fan design  |
| Dimensions (L x W x H)        | 100mm x 70mm x 30mm   |
| Installation mode             | Din Rail or Wall-Mount  |
| Weight                        | 250g  |
| <b>Working Environment</b>    |   |
| Operating Temperature         | -40 °C ~ +80 °C   |
| Operating Humidity            | 5%~90% non-condensing   |
| Storage Temperature           | -40 °C ~+85 °C  |
| <b>Warranty</b>               |   |
| MTBF                          | 500 000 hours   |
| Standard Warrantly            | 5 years and lifetime technical support  |
| <b>Certification standard</b> |   |
| EMI                           | FCC Part15 Subpart B<br>Class A, EN 55022 Class A   |
| EMS                           | EN61000-4-2(ESD),<br>EN61000-4-3(RS),<br>EN61000-4-4(EFT),<br>EN61000-4-5(Surge),<br>EN61000-4-6(CS),<br>EN61000-4-8,<br>EN61000-4-11 |
| Collision                     | IEC60060-2-27   |
| Drop                          | IEC60068-2-32   |
| Vibration                     | IEC60068-2-6  |
| Safety Grade                  | EN60950-1   |

## Product References

| Reference         | Gigabit Managed Media Converter  |
|-------------------|--|
| FOCD-H-2TGPS-USFP | Industrial Unmanaged media converters DIN rail format, 2x10/100/1000BT PoE PSE 802.3af/at 30W to100/1000FX SFP, -40 to+80 °C, 48VDC power supply input available with power booster 12~48VDC on terminal block. Metallic housing, power consumption 5W (without PoE). No power adapt included. |



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