

# IVS-G802T-8PH24

10x GbE RJ45 with 8x PoE , 12/24/48VDC , E-Mark

**NEW**



- E-Mark, CE, FCC certified
- 12/24/48VDC redundant dual input power with built-in very high efficiency booster
- Regulate PoE output voltage (52VDC) to stabilize PoE device, and guarantee delivery PoE power distance to 100meter



The E-Mark or e-Mark is a European conformity mark that certifies that a vehicle or vehicle component complies with EU regulations, laws and directives. CTC IVS-G802T-8PH24 Ethernet switch supports 8 x 1GbE PoE+ ports plus 2 x 1GbE non-PoE ports. With an input power range of 12/24/48VDC, this switch is suitable for vehicle battery power supplies and is e-Mark certified to ensure adequate safety, meeting all environmental requirements for installation in vehicles.

## Features

- Provides 8x IEEE 802.3at/af PoE+ output, 30W/port
- Supports flow control
- Jumbo frame support
- IP30 rugged metal housing and fanless
- Wide operating temperature -40 ~ 75°C ("E" model)

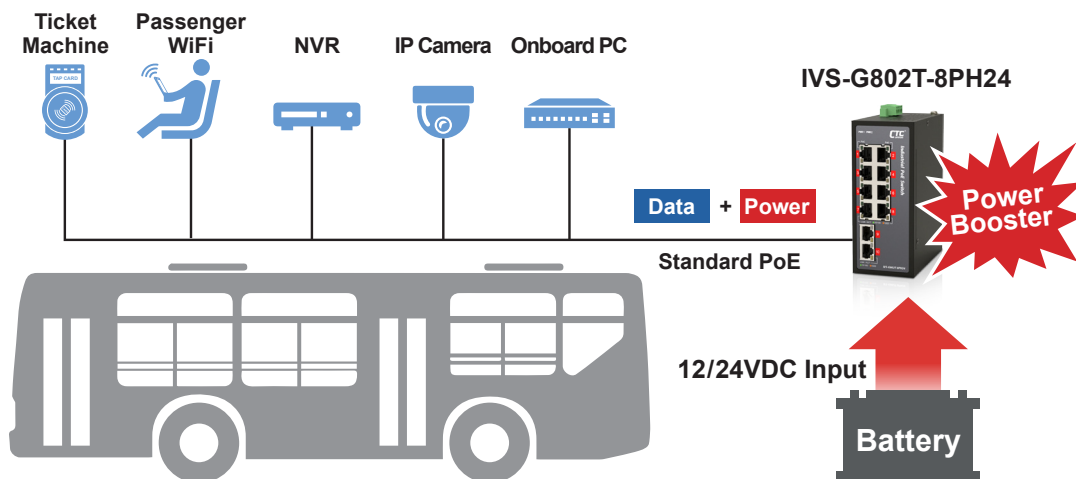
## Specifications

<b>IEEE Standard</b>	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3x Flow Control and Back Pressure IEEE 802.3af PoE (Power over Ethernet) IEEE 802.3at PoE+ (Power over Ethernet enhancements)
<b>Switch Architecture</b>	Back-plane (Switching Fabric): 20Gbps Full wire-speed
<b>Data Processing</b>	Store and Forward
<b>Flow Control</b>	IEEE 802.3x flow control, back pressure flow control
<b>Jumbo Frame</b>	9K Bytes
<b>MAC Address Table</b>	4K
<b>PoE standard &amp; RJ-45 Pin Assignment</b>	8xIEEE 802.3at/af PoE+ 2 pairs PoE, PoE+ Positive (V+): RJ-45 pin 1, 2. Negative (V-): RJ-45 pin 3, 6. Data (1,2,3,6,4,5,7,8)
<b>Network Connector</b>	10x RJ-45 10/100/1000Base-T auto negotiation speed, Auto MDI/MDI-X function, Full/Half duplex
<b>Network Cable</b>	UTP/STP Cat. 5e cable or above EIA/TIA-568 100-ohm (100meter)
<b>Protocols</b>	CSMA/CD
<b>LED</b>	Per unit: Power 1 (Green), Power 2 (Green) Per port: 10/100 Link/Active (Green) 1000 Link/Active (Amber)  Per Port PoE LED • Active : ON • Inactive : OFF
<b>Reverse Polarity Protection</b>	Supported for Power Input
<b>Overload Current Protection</b>	Supported
<b>Power Supply</b>	Redundant Dual DC 12/24/48VDC (9.6~57VDC) input power (Removable Terminal Block) Built-in very high efficiency booster(94~97%) to rise up 52VDC for PoE output Regulated PoE output voltage (52VDC) to stabilize PoE device, and guarantee delivery PoE power distance to 100meter (Figure 2)
<b>Power Consumption</b>	TBD

<b>PoE Power Budget</b>	Total 180W @48VDC, 30W/port Total 120W @24VDC, 30W/port Total 60W @12VDC, 30W/port
<b>Removable Terminal Block</b>	Provides 2 Redundant power, 4 pin
<b>Operating Temperature</b>	-10 ~ 60°C (IVS-G802T-8PH24) -40 ~ 75°C (IVS-G802T-8PHE24)
<b>Operating Humidity</b>	5% to 95% (Non-condensing)
<b>Dimensions</b>	106 x 55.5 x 135mm (D x W x H)
<b>Housing</b>	Rugged Metal, IP30 Protection, Fanless
<b>Weight</b>	TBD
<b>Installation Mounting</b>	DIN Rail mounting, or wall mounting (Optional accessories)
<b>MTBF</b>	TBD (MIL-HDBK-217)
<b>Warranty</b>	5 years
<b>Certification</b>	
<b>EMC</b>	CE (EN55032, EN55035)
<b>EMI (Electromagnetic Interference)</b>	FCC Part 15 Subpart B Class A, CE EN55022 Class A
<b>Vehicle</b>	E-Mark @ 24VDC
<b>EMS (Electromagnetic Susceptibility) Protection Level</b>	EN61000-4-2 (ESD) Level 3, Criteria B EN61000-4-3 (RS) Level 3, Criteria A EN61000-4-4 (Burst) Level 3, Criteria A EN61000-4-5 (Surge) Level 3, Criteria B EN61000-4-6 (CS) Level 3, Criteria A EN61000-4-8 (PFMF, Magnetic Field) Field Strength: 300A/m, Criteria A
<b>Shock</b>	IEC 60068-2-27
<b>Freefall</b>	IEC 60068-2-32
<b>Vibration</b>	IEC 60068-2-6

## Application

Figure 1 : PoE switch in smart Bus application



## Dimensions

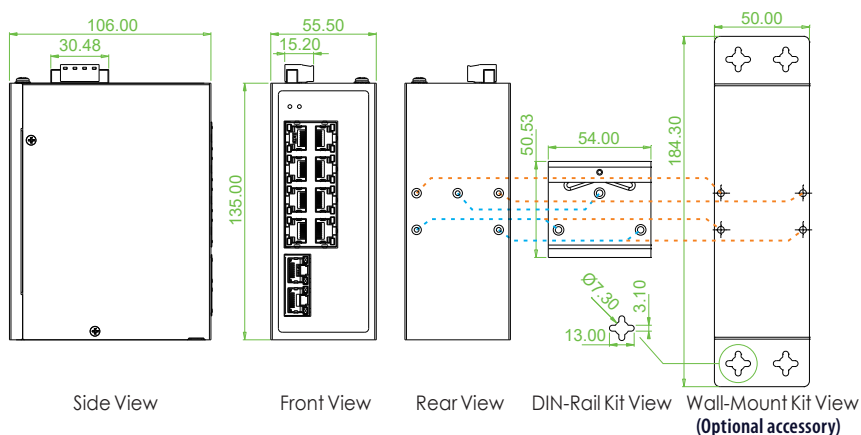
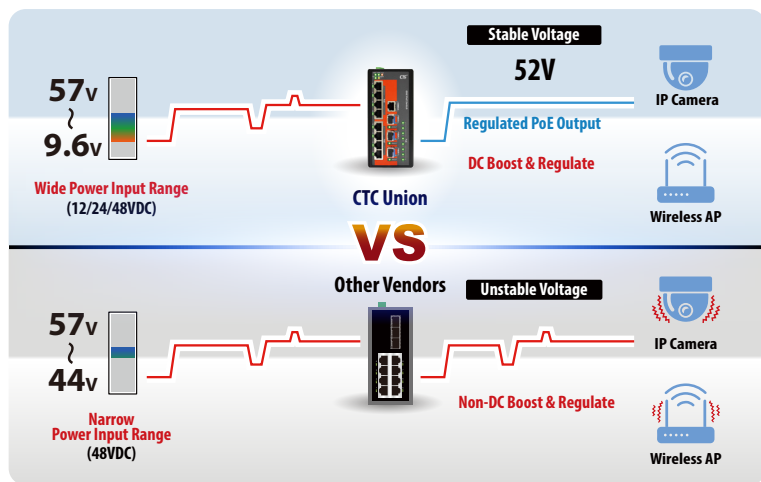


Figure 2 : High efficiency boost technology for PoE



- Regulated PoE output voltage (52VDC) to stabilize PoE device
- Guarantee delivery PoE power distance to 100 meters
- Wide range input power 12/24/48VDC (9.6~57VDC)
- Built-in very high efficiency (94~97%) to boost PoE output voltage

## Ordering Information

Model Name	Total Port	RJ45 UTP Port	PoE Port		Input Power	Certification		Operating Temperature
		10/100/1000 Base-T(X)	IEEE802.3at	Power Budget		EMark	CE, FCC	
IVS-G802T-8PH24	10	10	8	180W @48VDC 120W @24VDC 60W @12VDC	12/24/48VDC	V	V	-10~60°C
IVS-G802T-8PHE24	10	10	8	180W @48VDC 120W @24VDC 60W @12VDC	12/24/48VDC	V	V	-40~75°C

### Package List

- One of the series device
- Din Rail with screws
- Terminal block

## Optional Accessories

### Industrial Power Supply

NDR-240-48	Industrial Power, Input 90 ~ 264VAC/127 ~ 370VDC, Output 48VDC, 240W, -20 ~ +70°C
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