IVS-802GT-8PH24

8x FE RJ45 with 8x PoE + 2x GbE RJ45, 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-802GT-8PH24 Ethernet switch supports 8 x 10/100Mbps 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/per port
- Supports flow control
- Jumbo frame support
- IP30 rugged metal housing and fanless
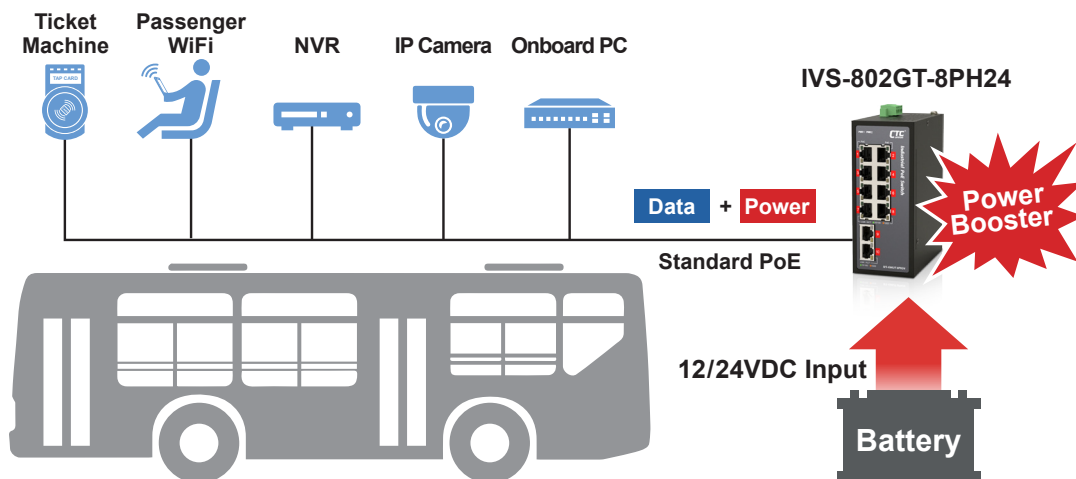- Wide operating temperature -40 ~ 75℃ ("E" model)

Specifications

IEEE Standard	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)
Switch Architecture	Back-plane (Switching Fabric): 5.6Gbps Full wire-speed
Data Processing	Store and Forward
Flow Control	IEEE 802.3x flow control, back pressure flow control
Jumbo Frame	9K Bytes
MAC Address Table	4K
PoE standard & RJ-45 Pin Assignment	8x IEEE 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)
Network Connector	8x 10/100Base-TX RJ45, and 2x 10/100/1000Base-T(X) RJ45 auto negotiation speed, Auto MDI/MDI-X function, Full/Half duplex
Network Cable	UTP/STP Cat. 5e cable or above
	EIA/TIA-568 100-ohm (100meter)
Protocols	CSMA/CD
LED	Per unit: Power 1 (Green), Power 2 (Green)
	Per port: 10/100 Link/Acttive (Green) 1000 Link/Active (Amber)
	Per Port PoE LED • Active : ON • Inactive : OFF
Reverse Polarity Protection	Supported for Power Input
Overload Current Protection	Supported
Power Supply	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)
Power Consumption	TBD

PoE Power Budget	Total 180W @48VDC Input, 30W/port Total 120W @24VDC input, 30W/port Total 60W @12VDC input, 30W/port
Removable Terminal Block	Provides 2 Redundant power, 4 pin
Operating Temperature	-10 ~ 60℃ (IVS-802GT-8PH24)
	-40 ~ 75℃ (IVS-802GT-8PHE24)
Operating Humidity	5% to 95% (Non-condensing)
Dimensions	106 x 55.5 x 135mm (D x W x H)
Housing	Rugged Metal, IP30 Protection, Fanless
Weight	TBD
Installation Mounting	DIN Rail mounting, or wall mounting (Optional accessories)
MTBF	TBD (MIL-HDBK-217)
Warranty	5 years
Certification	
EMC	CE (EN55032, EN55035)
EMI (Electromagnetic Interference)	FCC Part 15 Subpart B Class A, CE EN55022 Class A
Vehicle	E-Mark @ 24VDC
EMS (Electromagnetic Susceptibility) Protection Level	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
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

Application

Figure 1 : PoE switch in smart Bus application

Ticket Machine   Passenger WiFi   NVR   IP Camera   Onboard PC

IVS-802GT-8PH24

Data + Power

Standard PoE

Power Booster

12/24VDC Input

Battery

Dimensions

106.00 · 30.48 · 135.00 · 55.50 · 15.20 · 50.53 · 54.00 · 184.30 · 50.00 · Φ7.30 · 3.10 · 13.00

Side View   Front View   Rear View   DIN-Rail Kit View   Wall-Mount Kit View **(Optional accessory)**
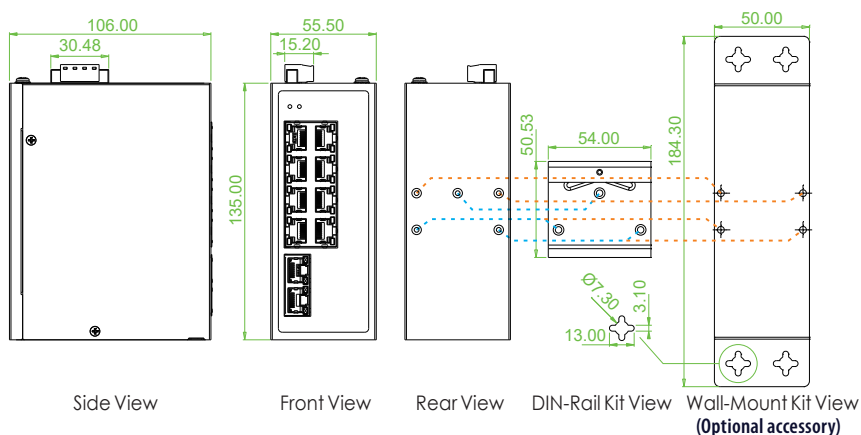
Figure 2 : High efficiency boost technology for PoE

Stable Voltage · 52V · IP Camera · Regulated PoE Output · DC Boost & Regulate · Wireless AP

57v ~ 9.6v · **Wide Power Input Range (12/24/48VDC)** · **CTC Union** · VS · **Other Vendors**

Unstable Voltage · IP Camera · Non-DC Boost & Regulate · Wireless AP

57v ~ 44v · **Narrow Power Input Range (48VDC)**
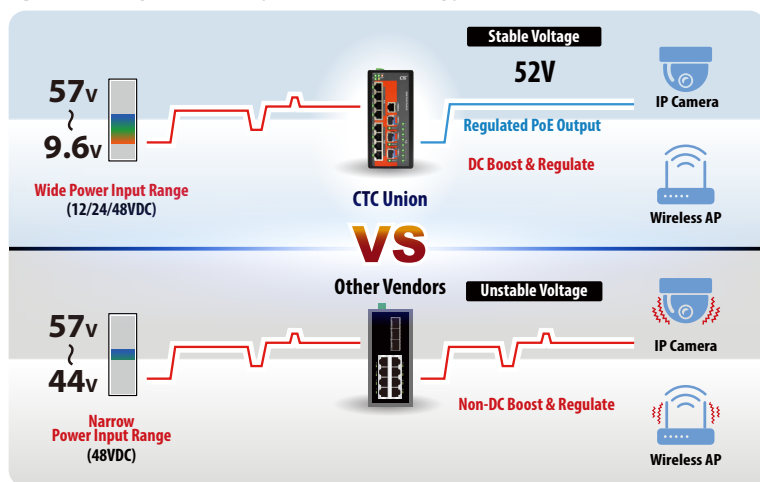
- Regulated PoE output voltage (52VDC) to stabilize PoE device
- Guarantee delivery PoE power distance to 100 meters
- Wide range input power 12/24/48VDC (9.6~57VDC)
- Built-in very high efficiency (94~97%) to boost PoE output voltage

Ordering Information

Model Name	Total Port	RJ45 UTP Port		PoE Port		Input Power	Certification		Operating Temperature
		10/100/1000 Base-T(X)	10/100Base-TX	IEEE802.3at	Power Budget	Redundant	E Mark	CE, FCC	
IVS-802GT-8PH24	10	2	8	8	180W @48VDC 120W @24VDC 60W @12VDC	12/24/48VDC	V	V	-10~60℃
IVS-802GT-8PHE24	10	2	8	8	180W @48VDC 120W @24VDC 60W @12VDC	12/24/48VDC	V	V	-40~75℃

■ **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℃