

# IVS-802GT-8PH24

## E-Mark Certified PoE Switch

### 8x FE RJ45 with 8x PoE + 2x GbE RJ45, 24/48VDC, E-Mark

- » 24/48VDC Redundant Dual Input Power with Built-in Very High Efficiency Booster
- » Regulate PoE Output Voltage (53VDC) to Stabilize PoE Device, and Guarantee Delivery PoE Power Distance to 100meter
- » E-Mark, EN50121-4, EN61000-6-2, EN61000-6-4, CE and FCC Certified



Industrial grade E-Mark certified PoE switch IVS-802GT-8PH24, with 2 Gigabit UTP ports and 8x 10/100Mbps PoE ports, input power range 24/48VDC, suitable for vehicle battery power supply. E-Mark is a European conformity mark that certifies that a vehicle or vehicle part complies with EU regulations. Laws and directives to ensure adequate safety and meet all environmental requirements for vehicle installation.

## Features

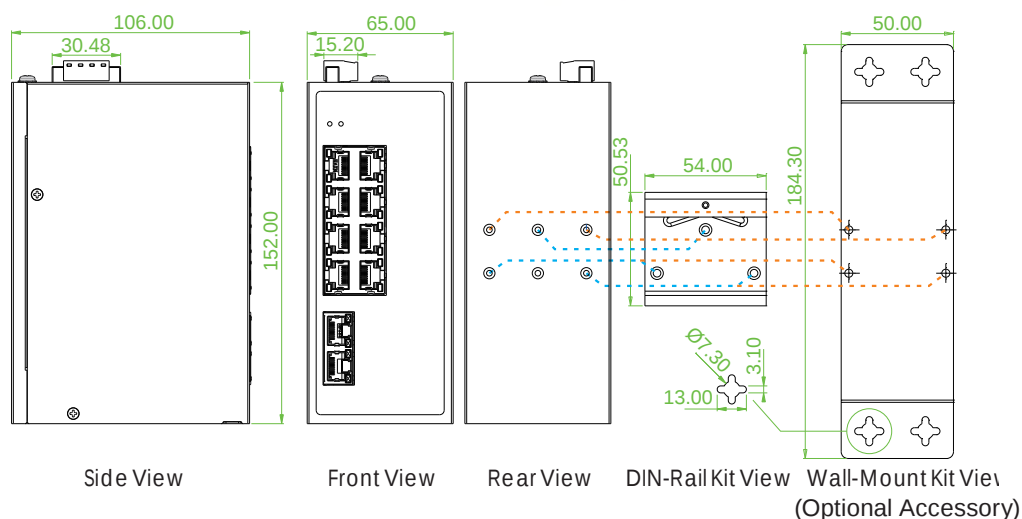
- Provides 8x IEEE 802.3at/af PoE+ output, 30W/port
- Supports flow control
- Jumbo frame support
- IP30 rugged metal housing and fanless
- Wide operating temperature -40 ~ 75°C ("E" model)

## Specifications

|                                     |                                                                                                                                                     |                                         |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 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) |
|                                     | 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+<br>2 pairs PoE, PoE+<br>Positive (V+) : RJ-45 pin 1, 2.<br>Negative (V-) : RJ-45 pin 3, 6.<br>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 (100 meter)                                                                                                                     |                                         |
| Protocols                           | CSMA/CD                                                                                                                                             |                                         |

|                                                                  |                                                                                                                      |                                |                                 |                         |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------------|-------------------------|
| <b>LED</b>                                                       | System: Power 1 (Green), Power 2 (Green)                                                                             |                                |                                 |                         |
|                                                                  | UTP: 10/100 Link/Active (Green), 1000 Link/Active (Amber)                                                            |                                |                                 |                         |
|                                                                  | PoE: ON (Green)                                                                                                      |                                |                                 |                         |
| <b>Reverse Polarity Protection</b>                               | Supported for Power Input                                                                                            |                                |                                 |                         |
| <b>Overload Current Protection</b>                               | Supported                                                                                                            |                                |                                 |                         |
| <b>Power Supply</b>                                              | Redundant Dual DC 24/48VDC (20~57VDC) input power (Removable Terminal Block)                                         |                                |                                 |                         |
|                                                                  | Built-in very high efficiency booster(94~97%) to rise up 53VDC for PoE output                                        |                                |                                 |                         |
|                                                                  | Regulated PoE output voltage (53VDC) to stabilize PoE device, and guarantee delivery PoE power distance to 100 meter |                                |                                 |                         |
| <b>Power Consumption</b>                                         | <b>Input Voltage</b>                                                                                                 | <b>Total Power Consumption</b> | <b>Device Power Consumption</b> | <b>PoE Power Budget</b> |
|                                                                  | 24VDC                                                                                                                | 135.6W                         | 11W                             | 120W                    |
|                                                                  | 48VDC                                                                                                                | 132.1W                         | 9.8W                            | 120W                    |
| <b>PoE Power Budget</b>                                          | Total 120W, 30W/port                                                                                                 |                                |                                 |                         |
| <b>Removable Terminal Block</b>                                  | Provides 2 Redundant power, 4 pin                                                                                    |                                |                                 |                         |
| <b>Operating Temperature</b>                                     | -10 ~ 60°C (IVS-802GT-8PH24)                                                                                         |                                |                                 |                         |
|                                                                  | -40 ~ 75°C (IVS-802GT-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 and Fanless                                                                            |                                |                                 |                         |
| <b>Weight</b>                                                    | 795g                                                                                                                 |                                |                                 |                         |
| <b>Installation Mounting</b>                                     | DIN Rail mounting or wall mounting (Optional accessories)                                                            |                                |                                 |                         |
| <b>MTBF</b>                                                      | 490,144 Hours (MIL-HDBK-217)                                                                                         |                                |                                 |                         |
|                                                                  |                                                                                                                      |                                |                                 |                         |
| <b>Certification</b>                                             |                                                                                                                      |                                |                                 |                         |
| <b>EMC</b>                                                       | CE (EN55032, EN55035)                                                                                                |                                |                                 |                         |
| <b>EMI<br/>(Electromagnetic Interference)</b>                    | FCC Part 15 Subpart B Class A, CE EN55022 Class A                                                                    |                                |                                 |                         |
| <b>Vehicle</b>                                                   | E13, E-Mark @24VDC                                                                                                   |                                |                                 |                         |
| <b>Railway Traffic</b>                                           | EN50121-4                                                                                                            |                                |                                 |                         |
| <b>Immunity for Heavy Industrial Environment</b>                 | EN61000-6-2                                                                                                          |                                |                                 |                         |
| <b>Emission for Heavy Industrial Environment</b>                 | EN61000-6-4                                                                                                          |                                |                                 |                         |
| <b>EMS<br/>(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                                                                                                        |                                |                                 |                         |

## Dimensions



## Ordering Information

| Model Name       | Total Port | RJ45                  |                | PoE             |              | Input Power | Certification |           |                            |         | Operating Temperature |
|------------------|------------|-----------------------|----------------|-----------------|--------------|-------------|---------------|-----------|----------------------------|---------|-----------------------|
|                  |            | 10/100/1000 Base-T(X) | 10/100 Base-TX | IEEE 802.3af/at | Power Budget |             | E Mark        | EN50121-4 | EN61000-6-2<br>EN61000-6-4 | CE, FCC |                       |
| IVS-802GT-8PH24  | 10         | 2                     | 8              | 8               | 120W         | 24/48VDC    | V             | V         | V                          | V       | -10~60°C              |
| IVS-802GT-8PHE24 | 10         | 2                     | 8              | 8               | 120W         | 24/48VDC    | V             | V         | V                          | V       | -40~75°C              |

## Optional Accessories

### ■ Industrial Power Supply

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