

**EHG2316C**

## Industrial 16-port Unmanaged Gigabit Switch with PoE/PoE+ Option and DIP Switch



### FEATURE HIGHLIGHTS

- 16 x 10/100/1000Base-T(X) RJ45 Ports; PoE/PoE+ model available
- Rugged IP40 housing
- Works from -40°C~70°C
- Four DIP switch functions:  
LLDP Forward/Block, QoS, Port Isolation, Broadcast Storm Control
- Reverse Polarity and Over-Current Protection

### PRODUCT DESCRIPTION

The Atop EHG2316C series includes 16-port industrial Gigabit Ethernet switches in non-PoE and PoE/PoE+ versions. The EHG2316C-16PoE complies with IEEE 802.3af and IEEE 802.3at. It delivers up to 15W per port for PoE or 30W per port for PoE+, subject to a 240W total PoE budget.

Four DIP switches provide LLDP packet forwarding/blocking, Strict QoS/non-QoS selection, port isolation, and Broadcast Storm Control.

Designed for rugged industrial environments, the EHG2316C series features:

- Model-specific input: 12-58VDC (non-PoE); 48-57VDC (PoE); 51-57VDC (PoE+).
- Required source rating: 1A min (non-PoE); 6A min (PoE); 5A min (PoE+).
- Dual power inputs with reverse-polarity and over-current protection.
- IP40 fanless housing; DIN-rail installation and optional wall mounting.
- -40°C to 70°C operation; IEC/EN/UL 62368-1, CE and FCC Class A compliance.

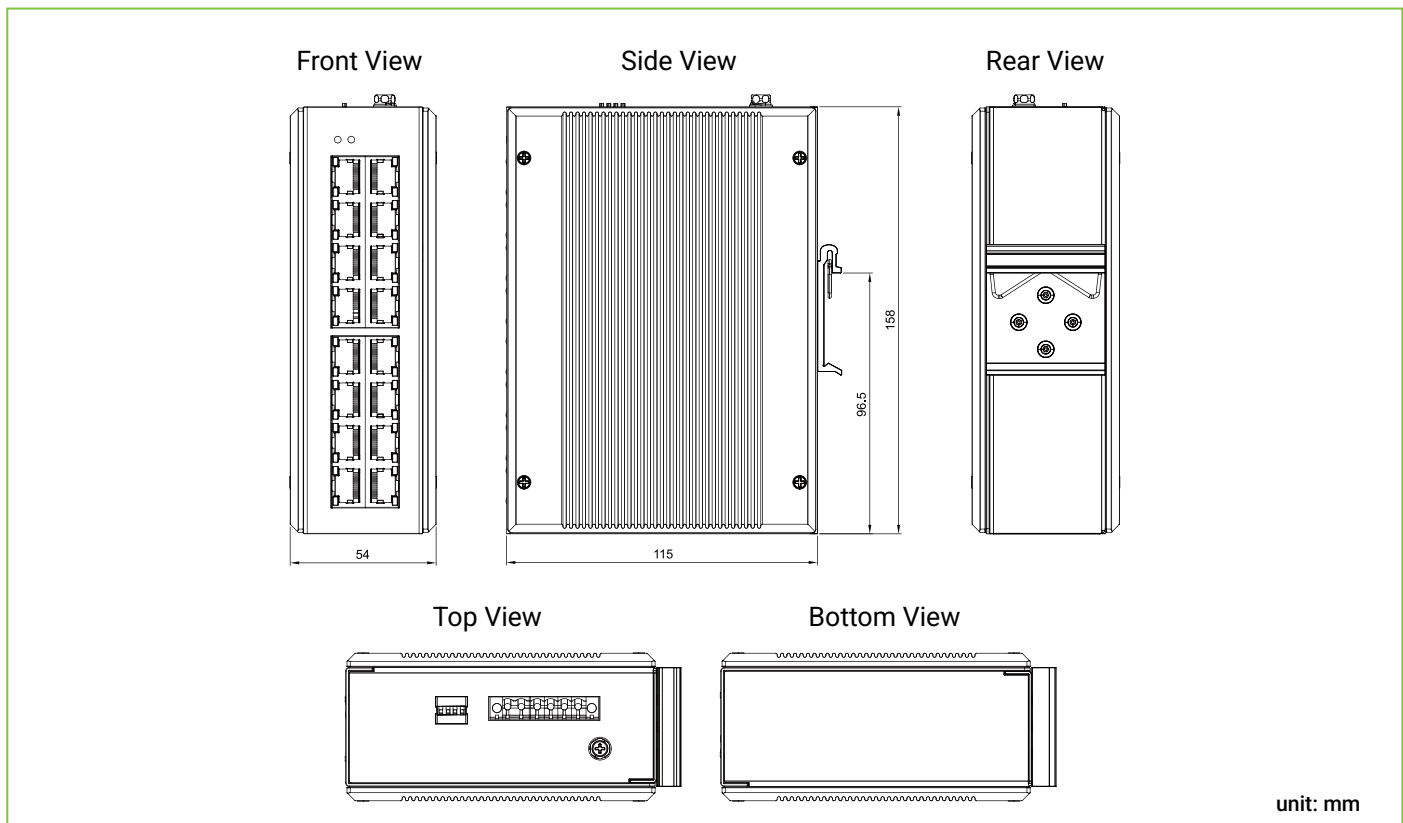
The series is suited to industrial automation, transportation, energy, surveillance, and other harsh-environment networks.

## SPECIFICATIONS

| Technical Specifications    |                                                                                                                                                                                                                                                |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Name                  | EHG2316C / EHG2316C-16PoE                                                                                                                                                                                                                      |
| Switch Properties           |                                                                                                                                                                                                                                                |
| Processing Scheme           | Store-and-Forward                                                                                                                                                                                                                              |
| Switching Capacity          | 32Gbps                                                                                                                                                                                                                                         |
| Forwarding Rate             | 47.6Mpps                                                                                                                                                                                                                                       |
| VLAN                        | 4K                                                                                                                                                                                                                                             |
| Forwarding Delay            | <5us                                                                                                                                                                                                                                           |
| MAC Address Table           | 4K                                                                                                                                                                                                                                             |
| Packet Buffer Size          | 2Mb                                                                                                                                                                                                                                            |
| Jumbo Frame                 | 10Kbytes                                                                                                                                                                                                                                       |
| Ethernet                    |                                                                                                                                                                                                                                                |
| Compliance                  | IEEE 802.3 for 10BASE-T<br>IEEE 802.3u for 100BASE-TX<br>IEEE 802.3ab for 1000BASE-T<br>IEEE 802.3x for Flow Control<br>IEEE 802.1Q / IEEE 802.1p for VLAN Tagging and Class of Service<br>IEEE 802.3af / IEEE 802.3at for Power-over-Ethernet |
| Flow Control                | Back pressure and pause frame-based flow control schemes                                                                                                                                                                                       |
| Transmission Rate           | 10/100/1000 Mbps on Gigabit ports                                                                                                                                                                                                              |
| Number of ports             | 16 x 10/100/1000 Mbps RJ45                                                                                                                                                                                                                     |
| Auto MDI/MDI-X              | Yes                                                                                                                                                                                                                                            |
| Power                       |                                                                                                                                                                                                                                                |
| Input Voltage               | Non-PoE: 12-58VDC; PoE: 48-57VDC; PoE+: 51-57VDC                                                                                                                                                                                               |
| Input Current               | Non-PoE: 1A Max; PoE: 6A Max; PoE+: 5A Max                                                                                                                                                                                                     |
| Max. Power Consumption      | Without PoE: <=10W; total PoE budget: 240W<br>Per port: <=15W (PoE), <=30W (PoE+), subject to 240W total                                                                                                                                       |
| Connector                   | Removable 6-pin 5.08mm power/relay terminal; relay output: 24VDC/1A                                                                                                                                                                            |
| Reverse Polarity Protection | Yes                                                                                                                                                                                                                                            |
| Over-Current Protection     | Yes                                                                                                                                                                                                                                            |
| LED                         |                                                                                                                                                                                                                                                |
| P(Power Indicator): Green   | Off: the device is power off or failed.<br>On: the device power is normal.                                                                                                                                                                     |
| S (Status / PoE Usage): Red | PoE model: Off <50%; blinking 50-90%; on >=90% of budget<br>Non-PoE model: Off = normal; on = abnormal                                                                                                                                         |
| LAN (Green)                 | Off: Ports link down<br>On: Ports link up<br>Blinking: Receiving data                                                                                                                                                                          |
| LAN (Yellow)                | PoE model: Off = PoE not working; on = PoE working<br>Non-PoE model: Off = 10/100Mbps; on = 1000Mbps                                                                                                                                           |

| DIP Switch                |                                                           |
|---------------------------|-----------------------------------------------------------|
| DIP 1                     | 0: LLDP packet block<br>1: LLDP packet forward            |
| DIP 2                     | 0: Non-QoS<br>1: Strict QoS                               |
| DIP 3                     | 0: port isolation disabled<br>1: port isolation enabled   |
| DIP 4                     | 0: Broadcast storm disabled<br>1: Broadcast storm enabled |
| Physical Characteristics  |                                                           |
| Housing                   | IP40                                                      |
| Dimension (W x H x D)     | 54mm x 158mm x 115mm                                      |
| Weight                    | 1.39Kg                                                    |
| Installation              | DIN-Rail mounting , Wall mount (optional kit)*            |
| Environmental Limits      |                                                           |
| Operating Temperature     | -40°C~70°C (-40°F~158°F)                                  |
| Storage Temperature       | -40°C~85°C (-40°F~185°F)                                  |
| Ambient Relative Humidity | 5%~95%, 55°C (Non-condensing)                             |

## DIMENSIONS & LAYOUT



## REGULATORY APPROVALS

| Regulatory Approvals |                                                                                                |                                               |                     |       |           |
|----------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------|-------|-----------|
| Safety               | IEC(CB)/EN 62368-1, UL62368-1                                                                  |                                               |                     |       |           |
| FCC (EMI)            | FCC Part 15, Subpart B, Class A                                                                |                                               |                     |       |           |
| CE (EMI)             | EN 55032:2015 + A1:2020 Class A<br>EN 61000-3-2:2014<br>EN 61000-3-3:2013<br>EN 61000-6-4:2019 |                                               |                     |       |           |
| CE (EMS)             | EN 55035:2017 + A11:2020<br>EN 61000-6-2:2019                                                  |                                               |                     |       |           |
| Test                 | Item                                                                                           |                                               | Value               | Level | Criterion |
| IEC 61000-4-2        | ESD                                                                                            | Contact Discharge                             | ±4kV                | 2     | B         |
|                      |                                                                                                | Air Discharge                                 | ±8kV                | 3     | B         |
| IEC 61000-4-3        | RS                                                                                             | 80-1000MHz<br>1.4-6.0GHZ                      | 10V/m               | 3     | A         |
|                      |                                                                                                |                                               | 3V/m                | 2     | A         |
| IEC 61000-4-4        | EFT                                                                                            | DC Power Port<br>Signal Port                  | ±1.0KV              | 2     | B         |
|                      |                                                                                                |                                               | ±1.0KV              | 3     | B         |
| IEC 61000-4-5        | Surge                                                                                          | DC Power Port<br>DC Power Port<br>Signal Port | Line-to Line±0.5KV  | 2     | B         |
|                      |                                                                                                |                                               | Line-to Earth±1.0KV | 2     | B         |
|                      |                                                                                                |                                               | Line-to Earth±1.0KV | 2     | B         |
| IEC 61000-4-6        | CS                                                                                             | 0.15-80MHz                                    | 10 Vrms             | 3     | A         |
| IEC 61000-4-8        | PFMF                                                                                           | Enclosure                                     | 30 A/m              | 4     | B         |
| Shock                | IEC 60068-2-27                                                                                 |                                               |                     |       |           |
| Drop                 | IEC 60068-2-32                                                                                 |                                               |                     |       |           |
| Vibration            | IEC 60068-2-6                                                                                  |                                               |                     |       |           |
| RoHS                 | Yes                                                                                            |                                               |                     |       |           |
| MTBF                 | 300,000 hours (25°C) – 34.24 Years (25°C)                                                      |                                               |                     |       |           |
| Warranty             | 5 Years                                                                                        |                                               |                     |       |           |

## ORDERING INFORMATION

### Ordering information

| Model name     | Part Number      | Port Configuration |                  |
|----------------|------------------|--------------------|------------------|
|                |                  | Total RJ45 Ports   | PoE/PoE+ Capable |
| EHG2316C       | 1P1EHG2316C0001G | 16                 | 0                |
| EHG2316C-16PoE | 1P1EHG2316C0002G | 16                 | 16               |

### Optional Accessories

| Accessories Type |               | Part Number     | Description                                               |
|------------------|---------------|-----------------|-----------------------------------------------------------|
| Wall Mount       | WMK-450-Black | 70100000000052G | Aluminum wall mount kit                                   |
| Power Supply     | SDR-75-24     | 50500752240001G | 75W/3.2A, 24VDC; 88-264VAC/124-370VDC input; non-PoE only |
| Power Supply     | SDR-240-48    | 50502401480001G | 240W/5A, 48VDC; 88-264VAC/124-370VDC input; non-PoE only  |

\* **PoE/PoE+ power supply note:** the listed SDR-75-24 and SDR-240-48 do not satisfy the PoE/PoE+ source ratings on page 2.  
Use a supply that meets the applicable voltage/current rating and total load.