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 to 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 are industrial-grade 16-port Gigabit Ethernet switches. ThePoE/PoE+ version complies with IEEE 802.3af and IEEE 802.3at, delivering up to 15W per port for PoE or 30W per port for PoE+, subject to a 240W total PoE budget.

Configurable DIP switch settings allow users to enable LLDP forwarding/blocking,strict QoS/non-QoS, port isolation, and broadcast storm control for enhanced network efficiency and reliability.

Designed for rugged industrial environments, the EHG2316C features:

- Wide-range input: 12-58VDC (non-PoE), 48-57VDC (PoE), 51-57VDC (PoE+).
- Robust IP40 fanless housing with DIN-rail installation for space-constrained setups.
- High-level EMI/EMC protection and compliance with EN/UL 62368, CE, and FCC standards.
- Shock, drop, and vibration resistance (IEC 60068-2 certified) for extreme industrial applications.
- Extended operating temperature range (-40°C to 70°C) for deployment in harsh conditions.

With its cost-effective, easy-to-use design, the EHG2316C is the perfect choice for heavy industrial factories, transportation, oil & gas, chemical plants, IP surveillance, and process automation, where reliability and durability are crucial.

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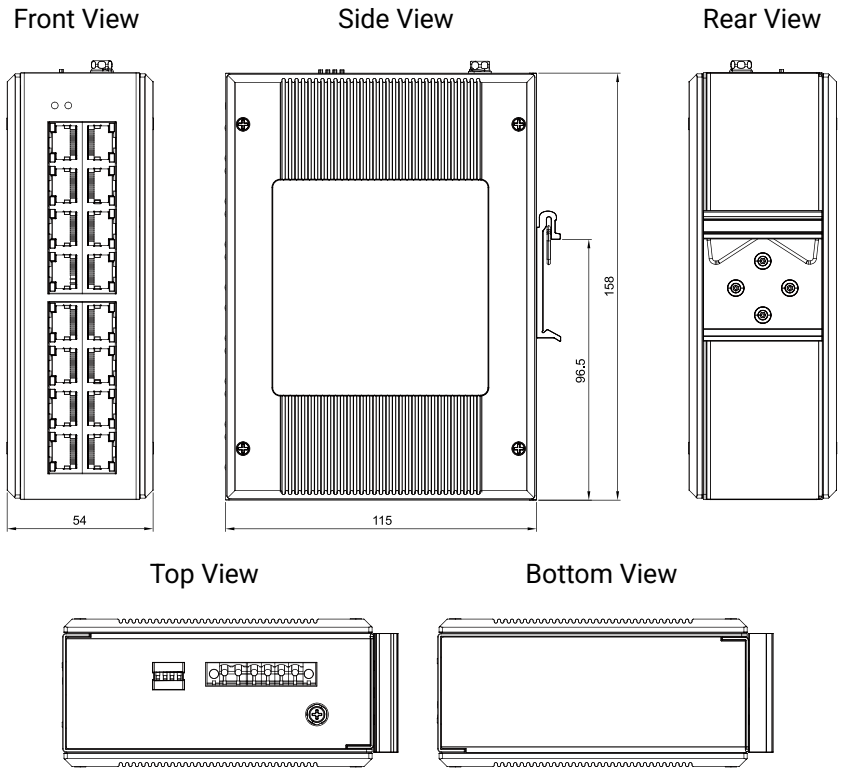
SPECIFICATIONS

Technical Specifications	
Model Name	EHG2316C / EHG2316C-16PoE
Switch Properties	
Processing Scheme	Store-and-Forward
Switching Capacity	32Gbps
Forwarding Rate	47.6Mpps
Forwarding Delay	<5us
MAC Address Table	4K
Packet Buffer Size	2Mb
Jumbo Frame	10Kbytes
Ethernet	
Compliance	IEEE 802.3 for 10BASE-T IEEE 802.3u for 100BASE-TX IEEE 802.3ab for 1000BASE-T IEEE 802.1q/p for VLAN Tagging and Class of Service IEEE 802.3af / IEEE 802.3at for Power-over-Ethernet
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	Switch consumption without PoE: <=10W Up to 15W per port for PoE or 30W per port for PoE+, subject to a 240W total PoE budget.
Connector	Removable 6-pin 5.08mm power/relay terminal block; relay output: 24VDC/1A
Reverse Polarity Protection	Yes
Over-Current Protection	Yes
LED	
P (Power Indicator): Green	Off: the device is powered off or failed. On: the device power is normal.
PoE (PoE usage; PoE models only): Red	Off: Total PoE usage < 50% Blinking: 50% =< Total PoE usage < 90% On: Total PoE usage >= 90%
S (Status; non-PoE models only): Red	Off: The system is operating normally On: The system is abnormal
LAN (Green)	Off: Port link down On: Port link up Blinking: Data is transmitting or receiving
LAN (Yellow)	PoE model: Off = PoE not working; on = PoE working Non-PoE model: Off = 10/100Mbps; on = 1000Mbps

DIP Switch	
DIP 1-LLDP	0: Block LLDP frames 1: Forward LLDP frames
DIP 2-QoS	0: Disable QoS 1: Enable QoS
DIP 3 - Port Isolation	0: Disable port isolation 1: Enable isolation among Ports 1-15
DIP 4 -Broadcast Storm Protection	0: Disable broadcast storm protection 1: Enable broadcast storm protection
LLDP: DIP 1 applies to destination MAC 01-80-C2-00-00-0E. Addresses 01-80-C2-00-00-00 through 01-80-C2-00-00-OD and 01-80-C2-00-00-OF are always blocked. **QoS:** IEEE 802.1p PCP-based classification with strict priority scheduling (Q7 highest, Q0 lowest)	
Physical Characteristics	
Housing	IP40
Dimension (W x H x D)	54mm x 158mm x 115mm
Weight	1.39 kg
Installation	DIN-Rail mounting , Wall mount (optional kit)
Environmental Limits	
Operating Temperature	-40°C to 70°C (-40°F to 158°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Ambient Relative Humidity	5%~95%, 55°C (Non-condensing)

DIMENSIONS & LAYOUT



unit: mm

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 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 61000-6-4:2019				
CE (EMS)	EN 55035:2017 + A11:2020 EN 61000-6-2:2019				
Test	**Item**		**Value**	**Level**	**Criterion**
IEC 61000-4-2	ESD	Contact Discharge Air Discharge	±4kV ±8kV	2 3	B B
IEC 61000-4-3	RS	80-1000MHz 1.4-6.0GHz	10V/m 3V/m	3 2	A A
IEC 61000-4-4	EFT	DC Power Port Signal Port	±1.0kV ±1.0kV	2 3	B B
IEC 61000-4-5	Surge	DC Power Port DC Power Port Signal Port	Line-to Line±0.5kV Line-to Earth±1.0kV Line-to Earth±1.0kV	2 2 2	B B 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	
		RJ45 10/100/1000	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 DIN-Rail 24VDC power supply 88-264VAC / 124-370VDC input
Power Supply	SDR-240-48	50502401480001G	240W/5A DIN-Rail 48VDC power supply 88-264VAC / 124-370VDC input

*** Power supply applicability:** SDR-75-24 is for non-PoE models only. SDR-240-48 is for reduced PoE loads only and does not meet the full 240W budget or PoE+ input-voltage requirement.