

EHG7305/7306/  
7307 Series

## Industrial PoE Unmanaged Gigabit Ethernet Switch



## FEATURE HIGHLIGHTS

- EHG730X series support maximum 5 x 10/100/1000 Base-T(X) RJ45 ports, 1 x 100/1000 Base-F(x) SFP port and 1 x 1000 Base-X SFP port\*
- Up to 4 802.3af or 802.3at compliant PoE ports
- Support 10K Jumbo frames
- Supports 802.3az Energy Efficient Ethernet for power savings
- Works from -40°C~70°C
- Failed power input alarm contact
- Certified by UL 61010-2-201 and UL C1D2/ATEX Zone 2
- EN50155 / EN50121-4 certified for Railway and Trackside applications

\* 1000 Based-X SFP is only supported in EHG7307

## PRODUCT DESCRIPTION

The EHG7305/7306/7307 are 5-7 Port PoE Unmanaged Gigabit Ethernet Switches designed to work in mission critical environments such as mining and heavy industry. EHG730X series support maximum 5 x 10/100/1000 Base-T(X) RJ45 ports, 1 x 100/1000 Base-F(x) SFP port and 1 x 1000 Base-X SFP port\*. With its high performance and non-blocking switching capacity, the EHG7300 Series is able to fulfill the increasing demand in industrial networking. Its PoE capability of 30W per port up to four ports simplifies the wiring in complex fields, where every cable is an added cost. The equipped terminal block provide dual redundant power inputs with Reverse Polarity Protection and relay output which allows field engineers to build up a fault alarm system. Its IP30 housing protection, wide operating temperature of -40 to 70°C and DIN-Rail mounting capacities are liable to do most industrial filed applications. The EHG7305/7306/7307 Series is fully EN50155-certified to ensure reliable performance under a wide range of power supply conditions, and it complies with essential sections of EN50121-4 for ground equipment.

\* 1000 Based-X SFP is only supported in EHG7307.

## SPECIFICATIONS

Technical Specifications						
Model Name	EHG7305	EHG7305-4PoE	EHG7306-1SFP	EHG7306-4PoE-1SFP	EHG7307-2SFP	EHG7307-4PoE-2SFP
<b>Switch Properties</b>						
Processing Scheme	Store-and-Forward					
MAC Address Table	8096					
Jumbo Frame	10K Bytes					
Packet Buffer	1 Mbits					
<b>Ethernet</b>						
Compliance	IEEE802.3 for 10BASE-T IEEE802.3u for 100BASE-T(X) and 100BASE-FX IEEE 802.3ab for 1000BASE-T IEEE 802.3z for 1000BASE-X IEEE 802.1Q for VLAN Tagging IEEE 802.1p for Class of Service IEEE 802.3x Flow Control IEEE 802.3af / 802.3at for Power-over-Ethernet IEEE 802.3az for Energy Efficient Ethernet					
Flow Control	Back pressure and pause frame-based flow control schemes					
LLDP	Forwarding					
Transmission Rate for RJ45	5 x 10/100/1000 Mbps					
Transmission Rate for SFP	EHG7306 1 x 100/1000 Mbps; EHG7307 SFP1: 1000Mbps / SFP2: 100/1000 Mbps					
Auto MDI/MDI-X	Yes					
<b>Power</b>						
Input Voltage	12-52 VDC*					
Input Current (System)	0.5A @ 12 V		0.6A @ 12V			
Max. Power Consumption (System)	6 W		7.2 W			
Input Current (with PoE)	-	2.6A @ 51 V	-	2.6A @ 51 V	-	2.6A @ 51 V
Max. Power Consumption (with PoE)	-	130 W	-	130 W	-	130 W
Relay Output	24 V / 0.5A					
Connector	Terminal Block					
<b>LED</b>						
Indicators	PWR1, PWR2, Alarm, RJ45 Act/Link, SFP Link, PoE					
<b>Physical Characteristics</b>						
Housing	IP30 protection according to EN 60529					
Material	SECC			Aluminum		
Dimension (W x H x D)	32 x 90 x 110 mm			45.3 x 89.6 x 110 mm		
Weight	420g			350g		
Installation	DIN-rail or wall-mount (optional)					
<b>Environmental Limits</b>						
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)					

\*802.3af PoE output starts from 43 VDC input and 802.3at output starts from 51 VDC input.

## REGULATORY APPROVALS

Regulatory Approvals				
Safety	UL 61010-2-201, UL C1D2/ATEX Zone 2			
EMC	EN 55032 EN 61000-6-4 EN 55024 EN 61000-6-2			
Rail Traffic	EN50155 / EN50121-4			
Test	Item		Value	Level
IEC 61000-4-2	ESD	Contact Discharge	±8KV	4
		Air Discharge	±15KV	4
IEC 61000-4-3	RS	80-1000MHz	10(V/m)	3
		1.4-2.0GHz	3 (V/m)	
		2.0-2.7GHz	1(V/m)	
IEC 61000-4-4	EFT	AC Power Port	±2.0KV	3
		DC Power Port	±2.0KV	3
		Signal Port	±2.0KV	4
IEC 61000-4-5	Surge	AC Power Port	Line-to Line±1.0KV	3
		AC Power Port	Line-to Earth±2.0KV	3
		DC Power Port	Line-to Line±1.0KV	3
		DC Power Port	Line-to Earth±2.0KV	3
		Signal Port	Line-to Earth±2.0KV	3
IEC 61000-4-6	CS	Conducted	10 Vrms	3
IEC 61000-4-8	PfMF	Enclosure	30 A/m	4
IEC 61000-4-11	DIP	AC Power Port	-	
Shock	MIL-STD-810F Method 516.5			
Drop	MIL-STD-810F Method 516.5			
Vibration	MIL-STD-810F Method 514.5 C-1 & C-2			
High Altitude	Certified for 4000m altitude according to IEC 60068-2-13			
RoHS	YES			
MTBF	TBD			
Warranty	5 years			

## ORDERING INFORMATION

### Ordering information

Model name	Part Number	Port Configuration			
		RJ45 (non-PoE) 10/100/1000 Mbps	RJ45 (PoE) 10/100/1000 Mbps	SFP slot 100/1000 Mbps	SFP slot 1000Mbps
EHG7305	1P1EHG73050001G	5	-	-	-
EHG7305-4PoE	1P1EHG73050002G	1	4	-	-
EHG7306-1SFP	1P1EHG73060001G	5	-	1	-
EHG7306-4PoE-1SFP	1P1EHG73060002G	1	4	1	-
EHG7307-2SFP	1P1EHG73070001G	5	-	1	1
EHG7307-4PoE-2SFP	1P1EHG73070002G	1	4	1	1

### Optional Accessories

Model name	Part Number	Description
WMK-315-Black	70100000000050G	Aluminum Wall Mount Kit,Black (only EHG7305)
WMK-454-Black	70100000000043G	Aluminum Wall Mount Kit,Black (for EHG7305-4PoE,EHG7306 and EHG7307)
SDR-75-24	50500752240001G	75W/3.2A DIN-Rail 24VDC power supply with universal 88~264VAC / 124~370VDC input
SDR-240-48	50502401480001G	240W/5A DIN-Rail 48VDC power supply with universal 88~264VAC / 124~370VDC input
LM38-A3S-TI-N	50708051G	SFP Transceiver, 155Mbps, 1310nmFP, Multi-mode, 2km, 3.3V, -40~85°C
LS38-A3S-TI-N	50709431G	SFP Transceiver, 155Mbps, 1310nmFP, Single-mode, 30km, 3.3V, -40~85°C
LM28-C3S-TI-N	50708031G	SFP Transceiver, 1250Mbps,850nmVCSEL,Multi-mode, 550m, 3.3V, -20~85°C
LM38-C3S-TI-N	50709411G	SFP Transceiver, 1250Mbps, 1310nmFP, Multi-mode, 2km, 3.3V, -40~85°C
LS38-C3S-TI-N	50709391G	SFP Transceiver, 1250Mbps, 1310nmFP, Single-mode, 10km, 3.3V, -40~85°C
LS38-C3L-TI-N	50709441G	SFP Transceiver, 1250Mbps, 1310nmDFB, Single-mode, 30km,3.3V, -40~85°C

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