EHG7704 EHG7706 EHG7708 EHG7708C EHG7711 Series

4, 6, 8 or 11-port Industrial Managed Gigabit PoE Switch

FEATURE HIGHLIGHTS

- Up to 8 x 10/100/1000 BASE-T(X) RJ45 ports and 2 x 2.5Gbps SFP slots
- Up to 8 x 802.3af/at/bt PoE ports with maximum 90W per port and maximum 180W or 120W power budget
- Powerful switching platform, supporting redundancy protocols, such as ERPS/RSTP/STP/MRP and compatible rings
- IEEE 1588v2 Precision Time Protocol HW-Based TC/BC
- CE/FCC/UL certificated with wide operation temperature -40°C to +75°C
- Compliance with IEC62443-4-1 development and functions requirements
- Slim type housing for limited space

PRODUCT DESCRIPTION

The EHG7704/06/08(C)/11 Series is an Industrial Grade Managed Gigabit Ethernet PoE Switch. UL, CE and FCC certified, it provides highly reliable, fault tolerant, extremely fast network connections in harsh environments.

Versatile high performance: Within its compact DIN-Rail slim type housing design, the EHG7704/06/08(C)/11 series allows you to choose between different port combinations: 1G BASE-T(X) RJ45, IEEE 802.3af/at/bt compliant PoE RJ45, 1G BASE-X SFP and 2.5G Base-X SFP, achieving maximal network performance to suit your exact needs

High power and redundancy: EHG7704/06/08(C)/11 series provide, in its 8-PoE-Port Version, up to 90W per port and total 180 W power budget. The “C” models provide total 120 W power budget. All models have two terminal blocks to provide dual redundant power inputs with reverse polarity protection, enabling stand-alone fault alarm systems.

Reliability and security: Set up a reliable network environment through RSTP, ERPS Rings and MRP (Manager/Client) redundancy and keep equipment connected all the time, even in case of temporary network breakdowns. And to prevent network intrusions, EHG7704/06/08(C)/11 supports user account, password policy, and authentication interface managements functions that comply with the IEC62443 standard.

Industry-specific features: Having undergone environmental testing to ensure reliable performance under a variety of power supply conditions, this switch series is fully compliant for today’s demanding railway applications, as well as complying with essential ground equipment standards. It can also function as an IEEE 1588 hardware-based boundary or transparent clock, offering precise transmission for time-sensitive processes.

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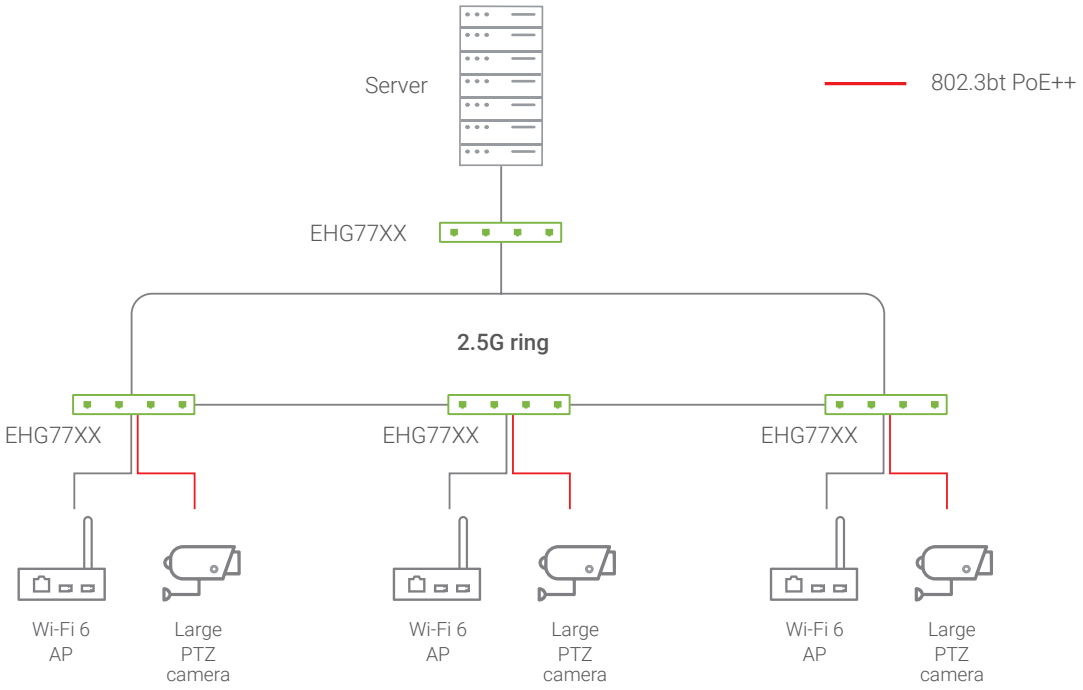
APPLICATION CASES

As the capabilities of connected devices continue to improve with technologies like 5G and Wi-Fi 6, networks must also be able to handle faster transmission speeds. 2.5 Gigabit Ethernet (2.5 GbE) supports speeds between 1Gbps and 10Gbps, achieving upgrade for network performance without a complete infrastructure overhaul.

The EHG77xx switch is equipped with 2.5 Gbps SFP slots, making it a powerful tool for connecting advanced applications such as high-resolution CCTV and public Wi-Fi. It can replace slower switches in existing topologies, allowing old and new devices to operate at their full potential.

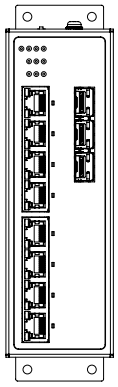


On the other hand, applications like pan-tilt-zoom (PTZ) cameras and devices that work under extreme weather conditions need higher power, over 30 W, to operate. EHG77xx's 802.3bt PoE ports provide up to 90 W per port, eliminating the need for additional power supply and cables on-site.

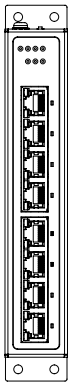
DIMENSIONS & LAYOUT

Front View

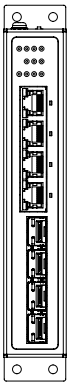
EHG7711-1SFP-225SFP
EHG7711-4POE-1SFP-225SFP
EHG7711-8POE-1SFP-225SFP



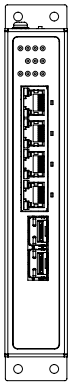
EHG7708
EHG7708-8POE



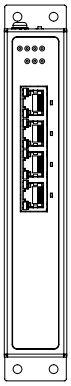
EHG7708(C)-2SFP-225SFP
EHG7708(C)-4PoE-2SFP-225SFP



EHG7706-225SFP
EHG7706-4POE-225SFP

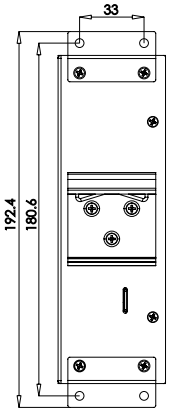


EHG7704
EHG7704-4POE

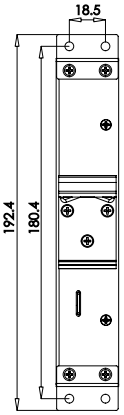


Rear View

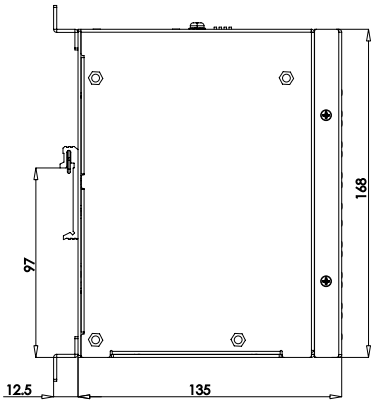
EHG7711



EHG77XX

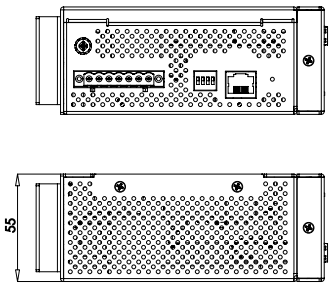


Side View

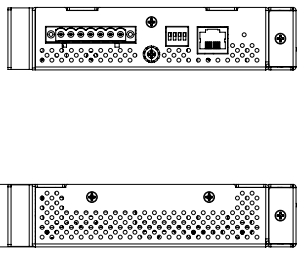


Front & Bottom View

EHG7711



EHG77XX



SPECIFICATIONS

Technical Specifications		
Model Name	EHG7704 / EHG7706 / EHG7708/EHG7708C / EHG7711	
Switch Properties		
Priority Queues VLAN Table MAC-Based VLAN VLAN ID Range Trunk Group Static IGMP Groups Dynamic IGMP Groups MAC Table Size Packet Buffer Size Jumbo Frame	8 4096 512 VID 1 to 4094 4 128 256 4K 1.75 Mb 9216 Byte	
Ethernet		
Standards	IEEE 802.3af/at/bt for Power-over-Ethernet IEEE 802.3/802.3u for 10BASE-T/100BASE-T(X) IEEE 802.3ab for 1000BASE-T IEEE 802.3z for 1000BASE-X IEEE 802.3x for Flow Control IEEE 802.1d-2004 for Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1s for Multiple Spanning Tree Protocol IEEE 802.1q/p for VLAN Tagging and Class of Service IEEE 8021x for Authentication IEEE 802.3ad for Port Trunk with LACP	
Protocols	IPv4, IPv6, IGMPv1/v2/v3, IGMP Snooping, GARP, GMRP, GVRP, SNMPv1/v2c/v3, SNMP Inform, ICMP, Telnet, SSH, Client/IP-port-mapping, BootP, TFTP, SMTP, SMTP (Gmail), RMON, HTTP, HTTPS, Syslog, MRP (Manager/Client), LLDP, 802.1x, EAP,RADIUS, TACACS+, Mirror port, QoS, ACL, ITU-T G.8032 ERPS Ring, STP, RSTP, MSTP, Compatible Ring/Chain, U-Ring, NTP Server/Client, Serial Console,Modbus/TCP, IEEE 1588 PTP V1/V2,UDLD, Security, PoE, Trunk, LACP, MLD, 802.1Q VLAN, Port-Based VLAN, MAC-Based VLAN, IP-Subnet-Based VLAN, Protocol-Based VLAN, QinQ, 802.1x, ARP spoof Prevention, DHCP snooping, IP source Guard, Dynamic ARP Inspection, DHCP relay Agent, OAM, sFlow, PoE continue	
Redundancy	ITU-T G.8032 ERPS, STP, RSTP, MSTP, MRP(Manager/Client), Compatible Ring/Chain, U-Ring	
Time Synchronization	Network Synchronization	NTP Server/Client, SNTP
	Precision Network Synchronization	IEEE1588 hardware-based TC End-to-End and Peer-to-Peer IEEE1588 hardware-based BC 802.1AS
Automation Profiles	Modbus/TCP device status registers provided	
SNMP MIB	MIB II, IF-MIB, SNMPv2 MIB, BRIDGE-MIB, RMON MIB Group 1,2,3,9, RFC RFC 1157, RFC 1213, RFC 1215, RFC 1493, RFC 1643, RFC 1757, RFC 2011, RFC 2012, RFC 2013, RFC 2233, RFC 2571, RFC 2742, RFC 2819, RFC 2863, RFC 3411, RFC 3412, RFC 3413, RFC 3414, RFC 3415,	

Power	
Input Voltage	9-57 VDC for Non-PoE models 45-57 VDC for 802.3af mode 53-57 VDC for for 802.3at/bt
Input Current (System)	2.2A Max. for Non-PoE models 4.5A Max. for 802.3af mode 3.8A Max. for for 802.3at/bt
	1.2A(TBD) Max. for Non-PoE models (EHG7708C) 2.9A(TBD) Max. for 802.3af mode (EHG7708C) 2.5A (TBD) Max. for for 802.3at/bt (EHG7708C)
Power Consumption (System)	10W Max. @57Vdc, for Non-PoE models 195W Max. @57Vdc, for 802.3af mode 195W Max. @57Vdc, for for 802.3at/bt
	(TBD) Max. for Non-PoE models (EHG7708C) (TBD) Max. for 802.3af mode (EHG7708C) (TBD) Max. for for 802.3at/bt (EHG7708C)
Connector	5-Pin 5.08mm Lockable Terminal Block
Reverse Polarity Protection	Yes
Interfaces	
RJ45 Ports	Up to 8 10/100/1000BASE-T(X) auto negotiation speed
Fiber Optics Ports	Up to 2 x 1000BASE-X SFP and 2 x 2500Base-X SFP
LED Indicators	PWR1, PWR2, Alarm, Run, Ring, Ring Master, RJ-45 Link/Speed, SFP Link, PoE
Console	RS232 (RJ45 connector)
Relay Output	2 relay outputs with current carrying capacity of 1A @ 24 VDC
DIP Switches	Ring Control
Button	Reset Button
Physical Characteristics	
Housing	IP30 aluminum housing
Dimension (W x H x D)	EHG7704/06/08(C): 168 x 135 x 32mm EHG7711: 168 x 135 x 55mm
Weight	800g
Installation	DIN-Rail , Wall mount (optional kit)
Environmental Limits	
Operating Temperature	-40°C to +75°C (-40°F to +167°F)
Storage Temperature	-40°C to +85°C (-40°F to +185°F)
Ambient Relative Humidity	5% to 95%, 55°C (Non-condensing)

REGULATORY APPROVALS

Regulatory Approvals				
Safety	UL/EN/IEC (CB) 62368-1			
EMI	FCC	FCC Part 15, Subpart B, Class A		
	CE	EN 55032:2015/A11:2020 Class A EN 61000-6-4: 2007 + A1: 2011 EN 61000-3-2: 2014, Class A EN 61000-3-3: 2013		
EMS	CE	EN 55035 :2017/A11:2020 EN 61000-6-2 2005		
Test	**Item**		**Value**	**Level**
IEC 61000-4-2	ESD	Contact Discharge Air Discharge	±4KV ±8KV	2 3
IEC 61000-4-3	RS	80-1000MHz 1.4-6.0GHz	10(V/m) 3(V/m)	3 2
IEC 61000-4-4	EFT	DC Power Port Signal Port	±2.0kV ±1.0kV	3 3
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
IEC 61000-4-6	CS	0.15-80MHz	10V rms	3
IEC 61000-4-8	PFMF	Enclosure	30 V/m	4
Shock Drop Vibration	MIL-STD-810G Method 516.5 MIL-STD-810F Method 516.5 MIL-STD-810F Method 514.5 C-1 & C-2			
RoHS II	Yes			
MTBF	20 Years			

ORDERING INFORMATION

Ordering information

Model name	Part Number	Description				
		1000Tx RJ45	PoE bt	100/1000 SFP	100/1000/2500 SFP	1588 support
EHG7704	1P1EHG77040001G	4				•
EHG7704-4PoE	1P1EHG77040002G	4	4			•
EHG7706-225SFP	1P1EHG77060001G	4			2	•
EHG7706-4PoE-225SFP	1P1EHG77060002G	4	4		2	•
EHG7708	1P1EHG77080001G	8				•
EHG7708-2SFP-225SFP	1P1EHG77080002G	4		2	2	•
EHG7708C-2SFP-225SFP	1P1EHG7708C002G	4		2	2	
EHG7708-8PoE	1P1EHG77080003G	8	8			•
EHG7708-4PoE-2SFP-225SFP	1P1EHG77080004G	4	4	2	2	•
EHG7708C-4PoE-2SFP-225SFP	1P1EHG7708C004G	4	4	2	2	
EHG7711-1SFP-225SFP	1P1EHG77110001G	8		1	2	•
EHG7711-4PoE-1SFP-225SFP	1P1EHG77110002G	8	4	1	2	•
EHG7711-8PoE-1SFP-225SFP	1P1EHG77110003G	8	8	1	2	•

Optional Accessories

Model name	Part Number	Description
WMK-450-Black	70100000000050G	SECC wall mount kit
CBL-RJ45(8P)-DB9(F)-90-C	50891971G	RJ45 to DB9 Female Cross Over Console Cable, 90cm
SDR-75-24	50500752240001G	75W/3.2A DIN-Rail 24VDC power supply 88~264VAC / 124~370VDC input
SDR-240-48	50502401480001G	240W/5A DIN-Rail 48VDC power supply 88~264VAC / 124~370VDC input
AXGD-5854-0513	522AXGD5854001G	SFP Transceiver, 1250Mbps, 850nm, Multi-mode, 550m, 3.3V, -40 to +85°C, DDMI
AXGD-1354-0523	522AXGD1354001G	SFP Transceiver, 1250Mbps, 1310nm, Multi-mode, 2km, 3.3V, -40 to +85°C, DDMI
AXGD-1354-0533	522AXGD1354011G	SFP Transceiver, 1250Mbps, 1310nm, Single-mode, 10km, 3.3V, -40 to +85°C,DDMI
AXGD-3354-0593	522AXGD3354001G	SFP Transceiver, 1250Mbps, 1310nm, Single-mode, 40km, 3.3V, -40 to +85°C,DDMI