

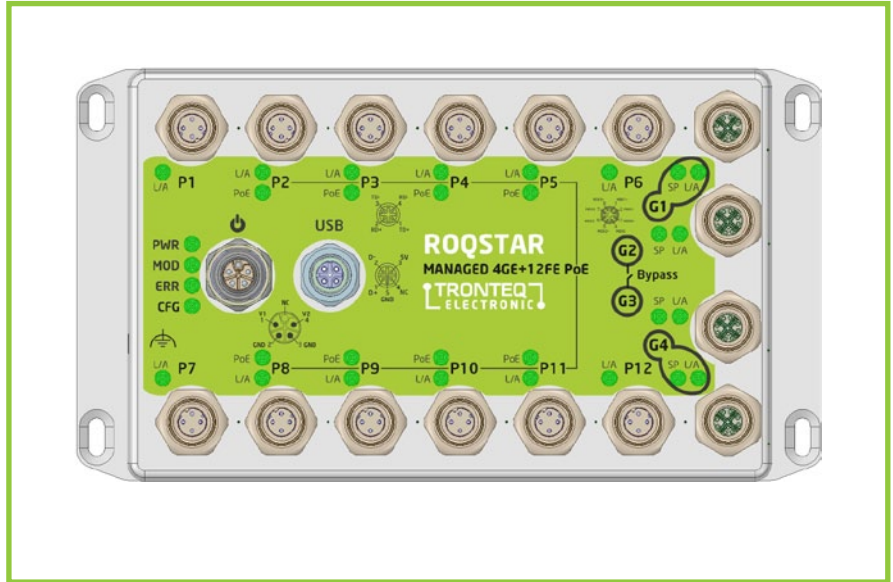
ROQSTAR Gigabit Managed PoE

16 Port M12 Ethernet Switch



ROQSTAR Gigabit ITxPT labeled Switch

The ROQSTAR16 port sets new standards for compactness and port density in the Bus and Railway market. Combined with quick-release M12 connectors ROQSTAR is a perfect fit for easy installation. With 4 Gigabit and 12 Fast Ethernet, the switch provides up to 62 Watt PoE power output. ROQSTAR is designed for applications in Buses and Light Rail Vehicles like CCTV, PIS, PCS.



IP54	PoE/PoE+
E-Mark	Easy to use
EN50155	Bypass relay
Bus	Railway

Description

The ultra compact and robust Ethernet Switch is the perfect fit for narrow space applications in Buses and Trams. Further the high port density provides gigabit ports for Ethernet backbone with a bypass relay for more reliability of the network.

ROQSTAR 4GE+12FE Managed PoE is a configurable layer 2 switch with layer 3 functions. It supports basic layer 2 features like VLANs and port-based DHCP. Further the Switch supports layer 3 functions like static IP-routing, NAT and PAT for high sophisticated networks in Buses and Trams.

Designed in a metal housing the switch is robust for onboard applications. Further the quick-release M12 connectors provide fast and secure connection and are able to endure high vibration and mechanical shocks. With it's light weight the ROQSTAR 16 port Switch is also ideal for the use in electrical vehicles.

Applications

- Realtime passenger information
- Gigabit backbone for CCTV
- Automatic IP address configuration
- Segmentation of networks
- High availability networks
- PoE from 24VDC vehicle voltage
- Quick installation and maintenance

Key Features

- 4 x 10/100/1000 Mbit/s
- 12 x 10/100 Mbit/s
- 8 x PoE Ports with PoE/PoE+
- Bypass relay on two Gigabit ports
- Quick-release M12 connectors
- Operation temp. -40°C ... +70°C
- Up to 62W total power
- IP54 metal housing
- E-Mark, EN50155
- IBIS-IP VDV 301-2-14 compliant
- ITxPT laboratory compliant

Technical specification

Connectors

M12 x-coded GE ports	4x 10/100/1000Mbps
M12 d-coded FE ports	12 x 10/100Mbps
M12 L-coded male	1 x power supply
M12 a-coded female	1 x USB port

Physical

Enclosure	aluminium die-cast
Protection class	IP54
Installation	wall mount
Dimensions (W x D x H)	217 x 55 x 120 mm
Weight non-PoE	830 g
Weight PoE	1050 g

Environment

Ambient temperature operating	-40°C ... +70°C
Ambient temperature storage	-40°C ... +85°C
Ambient relative humidity	10% ... 90% non condensing
Shock and Vibration	EN50155, IEC 61373

LED Display

System LEDs	PWR, ERR, MOD, CFG
Port LED Gigabit ports	link/activity, speed
Port LED Fast Ethernet ports	link/activity, PoE

Power non PoE

Power consumption	TBD at 24VDC
Operating voltage	9,6 ... 60 VDC
Power supply input	V1,V2 dual, polarity protected

MTBF

25°C	552 587 h
60°C	204 731 h

Approvals

EMC	EN50121-3-2, UN ECE R10
Environment	EN50155
Fire protection	EN45545, UN ECE R118
Labels	ITxPT, IBIS-IP

PoE features

PoE/PoE+ ports	8
Operating voltage	16...52 VDC, polarity protected
Rated PoE power	62 W total
Max. PoE power one port	30 W
PoE classes	PoE Class 0, 1, 2, 3, 4
Current limits	per port

Bypass relay

Two Gigabit ports	G2 and G3
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Layer 2 features

L2 MAC Address	16k
Jumbo Frames Switching	10kb
VLAN	802.1Q
VLAN Group	32 (VLAN IDs: 4094)
Port mirroring	multiple sources, single destination
Multicast	IGMP snooping, querier configurable
Storm protection	Broadcast, configurable: off, 1Mbps
Redundancy protocol	IEEE802.1D - STP, IEEE802.1s - MSTP, IEEE802.1w - RSTP

Management

DHCP	server: pool, port based, static leases, client password authorization web, SNMP v1/v2/v3
Access	https, USB port
Service	firmware update, configuration, factory reset

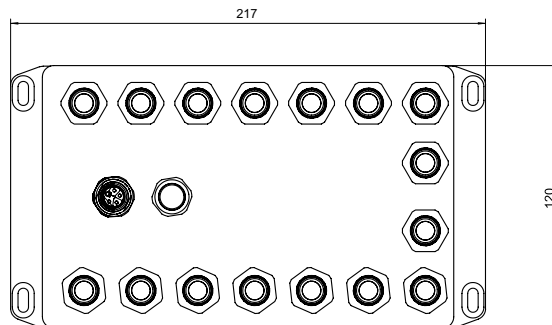
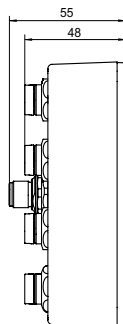
Layer 3 functions

NAT/PAT	1:N NAT, PAT
Firewall	L3 stateless firewall
IP-routing	static

Diagnose

Ethernet Ports	link up/down, traffic
Logging	link, system, PoE
PoE	on/off, allocated power budget
ITxPT	Module inventory

Drawing



Order information

Order no.	Product-Code	Description
006-130-127	ROQ-4G12F-M-LP-IP54	ROQSTAR Managed 4GE+12FE Gigabit Ethernet M12 PoE Switch, IP54