

Buoyant-U8M12 series

8- port Industrial Gigabit Unmanaged IP67 compliant Switches

This unmanaged Ethernet switch range with its option of 6 or 8 10/100/1000 ethernet ports and upto to 2, 1 Gbps SFP ports is suitable for a variety of industrial applications because of their very compact IP67 compliant design. The tough industrial enclosure design with wide temperature is suitable for mounting on a DIN rail and can be easily integrated into any Industrial environment that requires water resistance.

This series of switches are high performance unmanaged switches, providing wide temperature operation. With extensive market specific certifications it caters seamlessly to markets ranging from smart cities, surveillance, traffic, railway and industrial automation.

It supports power budget of up to 240W for PoE/PoE+, over 8 ports, and is ideal for connecting PoE powered end devices such as IP cameras, phones, wireless access points, sensors, and more.

Highlights



- Built for harsh environments and temperature ranges (-40°C to +75°C)
- Hardened for vibration, shock and surge, and electrical noise immunity, using M12 connector for vehicle, rolling stock, and railway applications
- 10/100/1000 Base-T/TX, Full-/Half-Duplex (Autonegotiation)
- Covers a wide range of Power over Ethernet (PoE/PoE+) application requirements
- Supports up to 8 PoE/PoE+ ports [Power budget - 240W]
- Packs up to 8 ports of Gigabit Ethernet - upto 2 x 1000 Base-X Small Form-Factor Pluggable (SFP) uplinks
- CE/FCC

Salients	Highlights
Designed to industrial needs	Built for harsh environments and temperature ranges (-40°C to +75°C) Fanless, convection-cooled with no moving parts for extended durability Hardened for vibration, shock and surge, and electrical noise immunity, using M12 connector for vehicle, rolling stock, and railway applications Store-and-Forward architecture 10/100/1000 Base-T/TX, Full-/Half-Duplex (Autonegotiation) Support auto MDI/MDI-X 16K MAC address lookup table 2 Mbit memory for frame buffering IEEE 802.3x Full duplex flow contro Support frame sizes up to 10K Bytes Covers a wide range of Power over Ethernet (PoE) application requirements
	Supports up to 8 PoE/PoE+ ports [Power budget - 240W] Controls costs by limiting wiring, distribution panels, and circuit breakers Reduces equipment needs, thus requiring less space and reducing heat dissipation Enables ready-to-use PoE devices, such as IP phones, cameras, and wireless access points
Gigabit Ethernet with comprehensive Industrial communication functions	Provides secure access for new high-speed applications in the industrial space Packs up to 8 ports of Gigabit Ethernet and upto 2x 1000 Base-X Small Form-Factor Pluggable (SFP) uplinks
Certifications tailored to multiple vertical segments	CE/FCC

Port configuration Listing		
Buoyant-U8M12-8PoE	8-Port Industrial Gigabit IP67 compliant Switch with 8 PoE ports	
Buoyant-U8M12-6PoE-2SFP	8-Port Industrial Gigabit IP67 compliant Switch with 6 PoE port and 2 1Gbps SFP ports	
Model	X-coded M12 (PoE/PoE+)	Fiber SFP
Buoyant-U8M12-8PoE	8	0
Buoyant-U8M12-6PoE-2SFP	6	2
Model	Power budget	Power
Buoyant-U8M12-8PoE	240W	Dual
Buoyant-U8M12-6PoE-2SFP	180W	Dual

Ethernet	
IEEE Standards	IEEE802.3 for 10BASE-T IEEE802.3u for 100BASE-T(X) and 100BASE-FX IEEE 802.3x Flow Control IEEE 802.3af / 802.3at for Power-over-Ethernet IEEE 802.3az for Energy Efficient Ethernet IEEE 802.3ab for 1000BaseT(X) IEEE 802.3z for 1000BaseX IEEE 802.3ah 100BASE-X SMF/MMF only IEEE 802.3x full duplex on 10BASE-T

Processing Type Back pressure and pause frame-based flow control schemes

Power specifications		
Features	Buoyant-U8M12-8PoE	Buoyant-U8M12-6PoE-2SFP
Input Voltage range	45-57 VDC for PoE and 51-57 VDC for PoE+	
Maximum input current	Max. 2.8 A@ 45 VDC for PoE Max. 4.9 A@ 51 VDC PoE+	Max. 2.2 A@ 45 VDC for PoE Max. 3.8 A @ 51 VDC PoE+
Power consumption	250W @ 51 VDC	190W @ 51 VDC
Connector	M12 K- coded 5- pin male connector	

Interfaces	
Ethernet	Up to 8 10/100/1000 BASE-T(X) auto negotiation speed-M12 X-coded female connector
Fiber Optics Ports	2 1000 BASE-X SFP slots
LED Indicators	PWR1, PWR2, Alarm, Ethernet PoE/Act/Link

Physical Characteristics	
Housing	IP67 compliant enclosure
Dimension (W x H x D)	190 mm x 200 mm x 51.5 mm
Weight	1.25 kg
Installation	Wall-mount (optional din-rail kit)

Environmental limits	
Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Ambient Relative Humidity	5%~95%, 55°C (Non-condensing)

Compliance	
Aspect	Details
Safety	EN62368-1 (LVD)
EMC	EN 55032/35
EMI	CISPR 22, 32, FCC Part 15B Class A
EMS	EN61000-6-2/6-4 IEC 61000-4-2 ESD IEC 61000-4-3 RS IEC 61000-4-4 EFT IEC 61000-4-5 Surge IEC 61000-4-6 CS IEC 61000-4-8 PFMF
Railway	EN50121-4
Traffic control	NEMA TS2 (optional)
Vibration	MIL-STD-810G, Method 514.8 (optional)
Shock	MIL-STD-810G, Method 516.6 (optional)
Drop	MIL-STD-810G, Method 516.6 (optional)
RoHS II	Yes

Warranty	
10 years limited hardware warranty on all Pantherun branded products	

Ordering Information	
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Buoyant-U8M12-6PoE-2SFP	8-Port Industrial Gigabit IP67 compliant Switch with 6 PoE port and 2 1 Gbps SFP ports

* Waterproof cap for unused ports not included