B&B ELECTRONICS

PRODUCT INFORMATION

ESW105 and ESW108 Series
5 & 8 Port,
Ultra Compact Industrial Ethernet Switches

E-LINX™
Industrial Ethernet Switch

Features

✓ Designed to meet (Heavy) Industrial Environments - EN61000-6-2 Certifications

✓ Ultra Compact design - Less than 1 inch wide

✓ Shock, Vibration, Free Fall Tested

✓ LC Single and Multi mode fiber ports

✓ 10/100M, full/half duplex, MDI/MDI-X (Auto-negotiate)

✓ Supports IEEE 802.3, 802.3u, and 802.3x standards

✓ Industrial IP30 rated DIN rail case with 6 different Panel mount options

✓ Dual power inputs, 12 to 36 VDC and 10 to 24 VAC

✓ 2K MAC addresses

Functional Description

Designed to fit many applications, the ESW105 and ESW108 series are more than just an Ethernet switch with a great low pricing. They are plug-and-play industrial Ethernet Switches with an ultra compact IP30 DIN rail case, 6 way mountable panel brackets, LEDs for Power, (Link / Speed / Activity for each port), 12 to 36 VDC and 10 to 24 VAC power inputs with removable terminal blocks. These switches are perfect for any applications that require special protection from hash environments.

Choose a switch with five or eight copper ports, or a combination of copper and fiber ports. Multi-mode fiber models extend range up to 2 km. Single-mode fiber models extend range up to 20 km. All models require an external power supply (sold separately).

The switch ships with 4 panel mount clips giving the user 6 different ways to panel mount the unit.

Ordering Information

Model Number	10/100 Copper	Multi-Mode Fiber	Single-mode Fiber
ESW105	5		
ESW105-ML	4	1 (LC)	
ESW105-SL	4		1 (LC)
ESW108	8		
ESW108-ML	7	1 (LC)	
ESW108-SL	7		1 (LC)

Accessory Items

MDR-20-24	DIN Rail Mount, 24 VDC, 1 A Power Supply
MDR-40-24	DIN Rail Mount, 24 VDC, 1.7 A Power Supply
DR19RMKT	Adjustable DIN Rail 19 Inch Rack Mount Kit
EIRSP1	Single Stage Surge Protector

We also offer a full line of Fiber Optic and RJ-45 Patch Cables

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Specifications

Technology
Standards:	IEEE802.3, 802.3u, 802.3x
Processing Type:	Store and forward with IEEE802.3x full duplex, non-blocking flow control
Flow Control:	IEEE802.3x flow control, back pressure flow control
Packet buffer memory:	64K bytes
Address Table Size	2K MAC Addresses

Interface
RJ45 Ports:	10/100BaseT(X) auto negation, Full/Half duplex, auto MDI/MD-X
Fiber Ports:	100BaseFX, (multi-mode or single–mode with LC connectors)
LED Indicators:	Power, (Link / Speed / Activity for each port)

Fiber Optics
Fiber Type	Distance	Wavelength	Transmit Power	Receive Sensitivity
Multi-mode	2 km	1310 nm	Neg. 23.5 to Neg. 14 dBm	≤ Neg. 35 dBm
Single-mode	20 km	1310 nm	Neg. 15 to Neg. 8 dBm	≤ Neg. 35 dBm

Power
Input Voltage	12 to 36 VDC and 10 to 24 VAC
Power Consumption	4.00 W Max
Input Connection	Removable Terminal Block
Protection	Reverse Polarity Protection

Environmental
Op. Temperature	-10 to 60 C (14 to 140 F)
Storage Temperature	-40 to 80 C (-40 to 176 F)
Humidity	10 to 95% Non-condensing
MTBF	200,000 hours
MTBF Calculation	Parts count reliability prediction

Mechanical
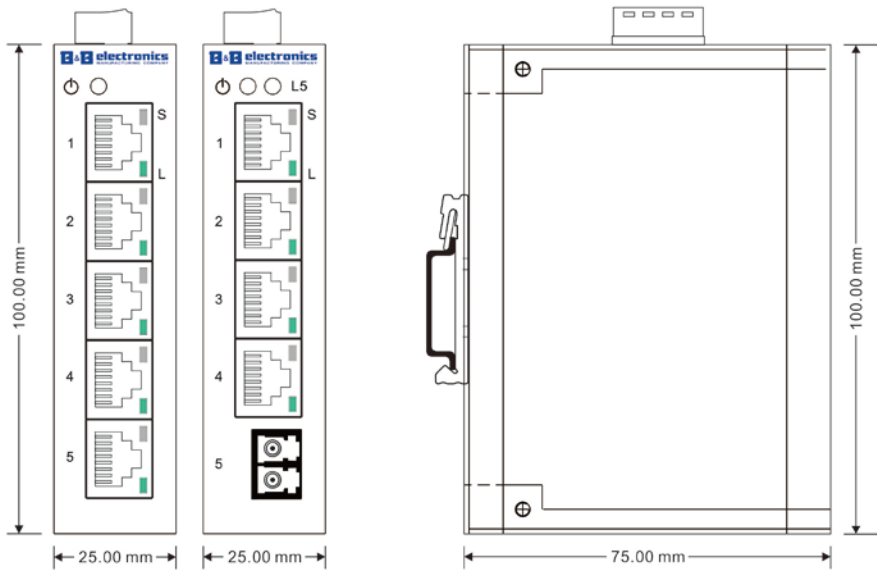|	
Enclosure	IP30 DIN mount metal case
Dimensions (5 ports)	H 100mm x W 25mm x D 75mm (3.94in x 0.98in x 2.95in)
Dimensions (8 ports)	H 145mm x W 24mm x D 75mm (5.71in X 0.94in x 2.95in)
Installation	35 mm DIN or 6 way panel mount

Regulatory Approvals
CE, FCC,

RoHS

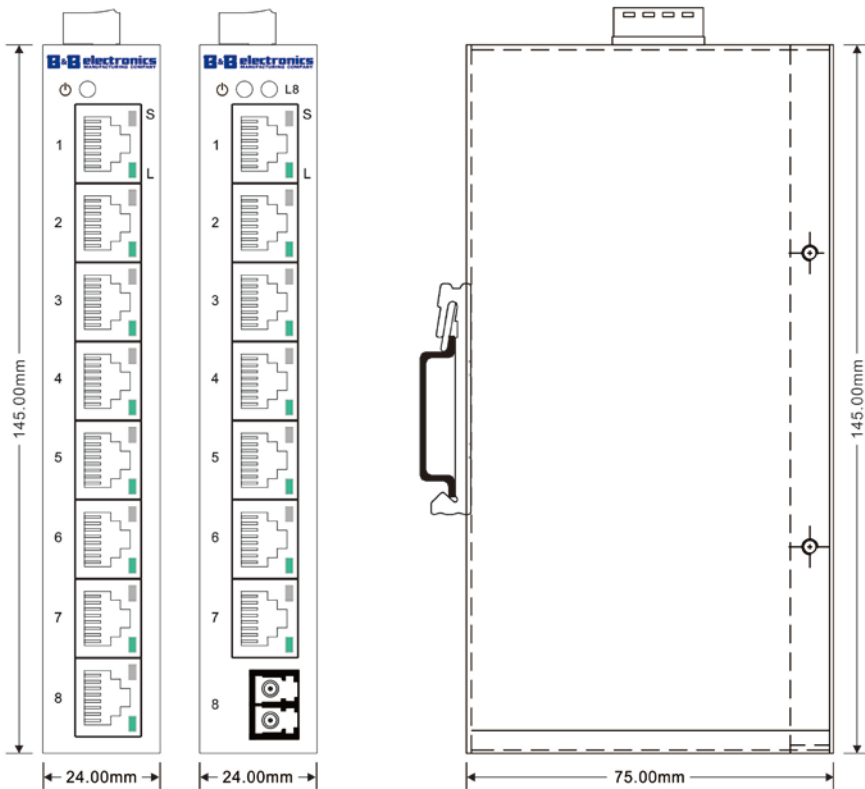## Specifications - EN 61000-6-2: 2006 Generic Standards for (Heavy) Industrial environments

Test	Description	Test Level		Level
EN 55022: 2006 + A1:2007	Class B Emissions			
EN 61000-4-2: 2009	Electro-Static Discharge (ESD)	Enclosure Contact	6kV	3
		Enclosure Air	8kV	3
EN61000-4-3:2006+A1:2008	Radiated Field Immunity (RFI)	Enclosure Ports	10V/m	3
EN61000-4-4:2004	Burst (Fast Transient)	Signal Ports	1kV@2.5Khz	3
		DC Ports	2kV	3
EN61000-4-5:2006	Surge	Signal Ports	1kV	3
		DC Power Ports	2kV	3
EN61000-4-6: 2009	Induced (Conductive) RFI	Signal Ports	10 V RMS	3
		DC Power Ports	10 V RMS	3

Environmental Specifications

Test	Description	Test Level		Level
IEC60068-2-6	Vibration	Test Fc	2G	-----
IEC60068-2-27	Shock	Test Ea	30G	-----
IEC 60068-2-32	Free Fall			-----
Operating Temperature		-10 to 60C	14 to 140F	
Storage Temperature		-40 to 80C	-40 to 176F	
Humidity		10 to 95% Non-condensing		

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ESW105-xx Series

ESW108-xx   Series

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