Slim Line (SL/SLX) Series Industrial Ethernet Switches & Media Converter

Hardware Guide | September 2020

LP0977 | Revision B
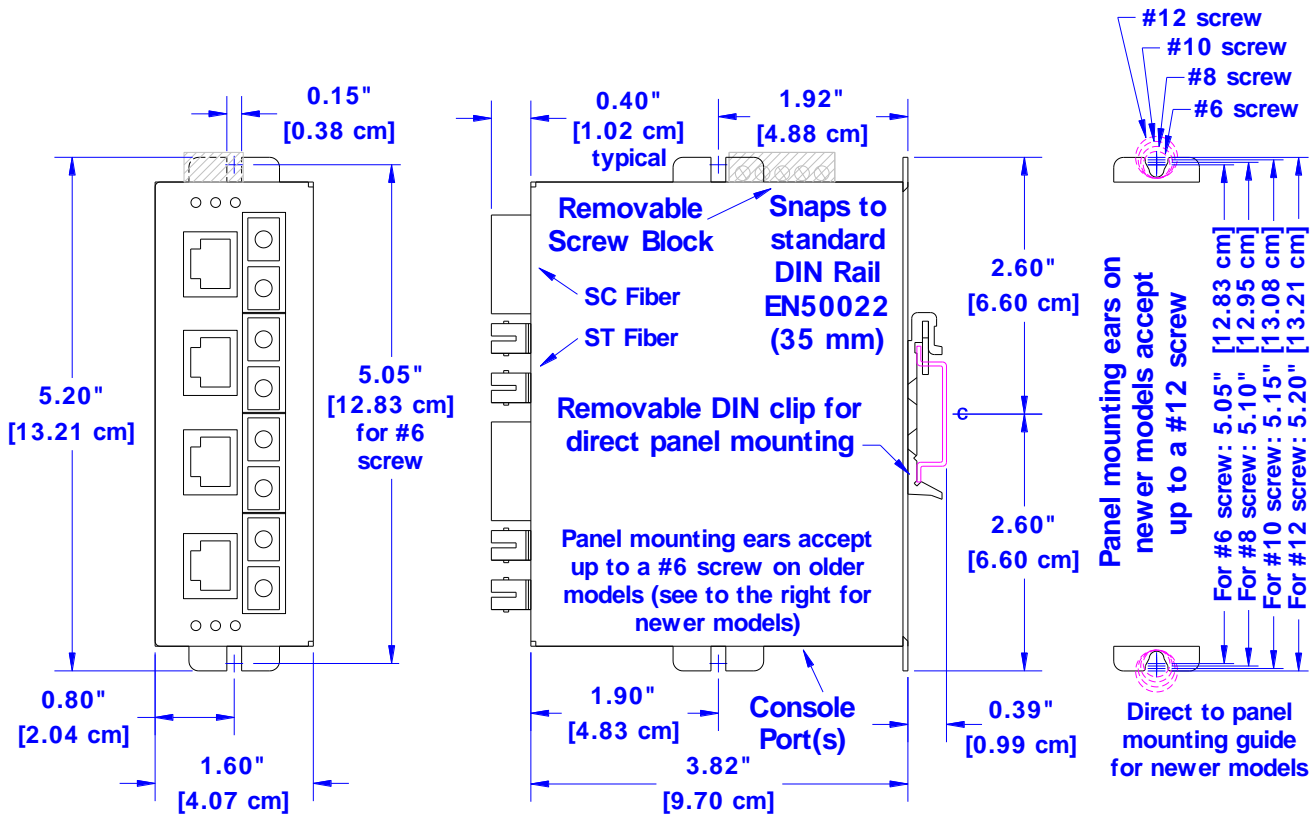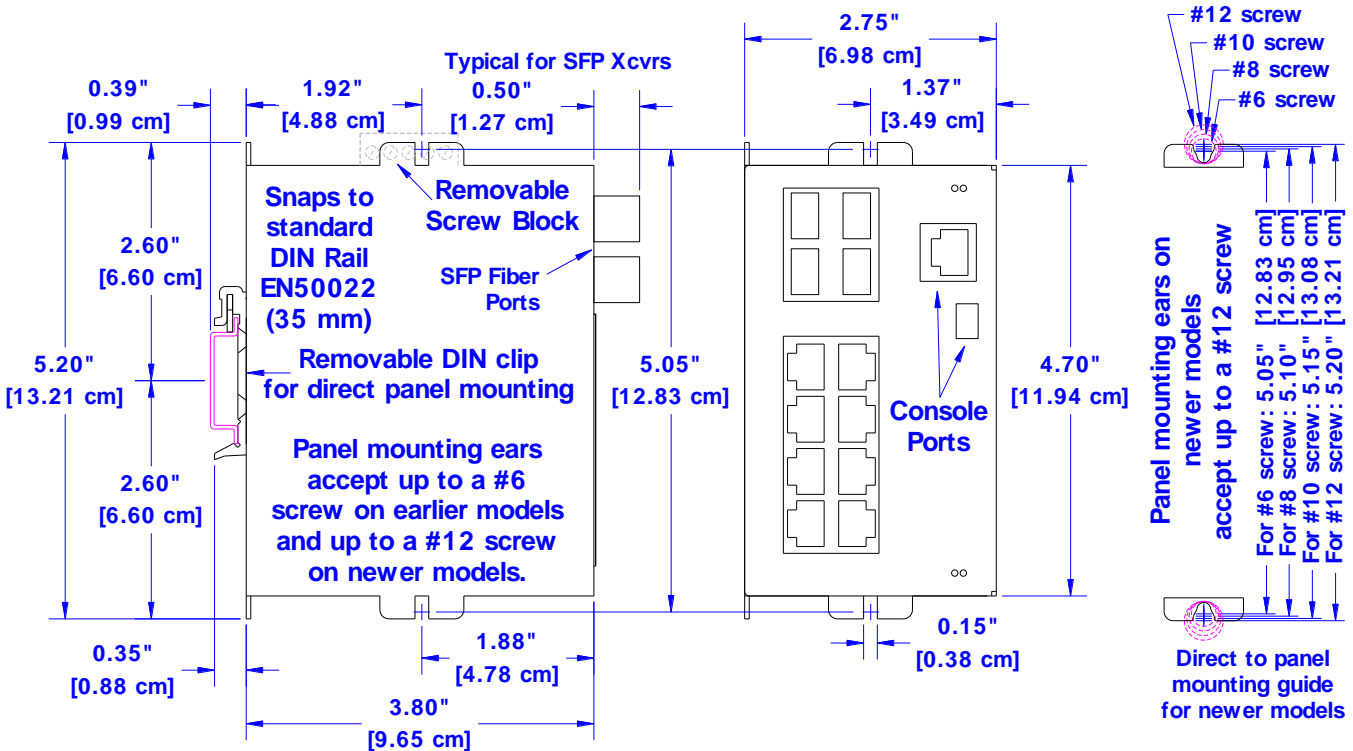
Preface

This manual applies to the following products:
- **SL-2ES-#**   2-port unmanaged Ethernet media converter
- **SLX-3ES-#**   3-port unmanaged Ethernet media converter
- **SLX-3EG-1**   3-port unmanaged Gigabit Ethernet converter
- **SLX-5EG-1**   5-port unmanaged Gigabit Ethernet switch
- **SLX-5EG-2SFP**   5-port unmanaged Gigabit Ethernet switch with 2 fiber SFPs
- **SL/SLX-5ES-#**   5-port unmanaged Ethernet switch with 5 10/100 ports
- **SL/SLX-6ES-#**   6-port unmanaged Ethernet switch
- **SL/SLX-8ES/9ES-#**   8/9-port unmanaged Ethernet switch with 8 or 9 10/100 ports
- **SLX-8MS-#**   8-port managed Ethernet switch with 8 10/100 ports
- **SLX-8MG-1**   8-port managed Ethernet switch with 8 Gigabit ports
- **SLX-10MG-1**   10-port managed Gigabit Ethernet switch with 10 ports
- **SLX-16MS-1**   16-port managed Ethernet switch with 16 10/100 ports
- **SLX-18MG-1**   18-port managed Gigabit Ethernet switch with 18 ports

FCC Statement - This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna; Increase the separation between the equipment and receiver; Connect the equipment into an outlet on a circuit different from that to which the receiver is connected; Consult the dealer or an experienced radio/TV technician for help.

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Mechanical Dimensions for SLX-8MS-8/9 with 4 Fiber Ports

Labels on first diagram:
- 0.15" [0.38 cm]
- 5.20" [13.21 cm]
- 0.80" [2.04 cm]
- 1.60" [4.07 cm]
- 5.05" [12.83 cm] for #6 screw
- 0.40" [1.02 cm] typical
- 1.92" [4.88 cm]
- Removable Screw Block
- SC Fiber
- ST Fiber
- Snaps to standard DIN Rail EN50022 (35 mm)
- Removable DIN clip for direct panel mounting
- Panel mounting ears accept up to a #6 screw on older models (see to the right for newer models)
- 1.90" [4.83 cm]
- Console Port(s)
- 3.82" [9.70 cm]
- 2.60" [6.60 cm]
- 2.60" [6.60 cm]
- 0.39" [0.99 cm]
- #12 screw
- #10 screw
- #8 screw
- #6 screw
- Panel mounting ears on newer models accept up to a #12 screw
- For #6 screw: 5.05" [12.83 cm]
- For #8 screw: 5.10" [12.95 cm]
- For #10 screw: 5.15" [13.08 cm]
- For #12 screw: 5.20" [13.21 cm]
- Direct to panel mounting guide for newer models

Mechanical Dimensions for SLX-8MG with 8 Gigabit Ports

Labels on second diagram:
- 0.39" [0.99 cm]
- 1.92" [4.88 cm]
- Typical for SFP Xcvrs
- 0.50" [1.27 cm]
- 2.75" [6.98 cm]
- 1.37" [3.49 cm]
- 2.60" [6.60 cm]
- 5.20" [13.21 cm]
- 2.60" [6.60 cm]
- Snaps to standard DIN Rail EN50022 (35 mm)
- Removable Screw Block
- SFP Fiber Ports
- Removable DIN clip for direct panel mounting
- Panel mounting ears accept up to a #6 screw on earlier models and up to a #12 screw on newer models.
- 5.05" [12.83 cm]
- Console Ports
- 4.70" [11.94 cm]
- 0.35" [0.88 cm]
- 1.88" [4.78 cm]
- 3.80" [9.65 cm]
- 0.15" [0.38 cm]
- #12 screw
- #10 screw
- #8 screw
- #6 screw
- Panel mounting ears on newer models accept up to a #12 screw
- For #6 screw: 5.05" [12.83 cm]
- For #8 screw: 5.10" [12.95 cm]
- For #10 screw: 5.15" [13.08 cm]
- For #12 screw: 5.20" [13.21 cm]
- Direct to panel mounting guide for newer models

Environmental and Compliances:	
Operating temperature range	SL-2ES models: -10 to +60°C (cold startup at -10°C) SL-5/6/8/9ES model: -40 to +60°C (cold startup at -40°C) SLX-3/5EG models: -40 to +85°C (cold startup at -40°C) SL/SLX-8MG models: -40 to +75°C (cold startup at -40°C) SLX-5/6/8/9ES-1/2/3/4/5 models: -40 to +85°C (cold startup at -40°C) SLX-8ES-6/7 models: -40 to 75° C (cold startup at -40°C) SLX-5/8MS models: -40 to +75°C (cold startup at -40°C) SLX-10/18MG-1 models: -40 to +75°C (cold startup at -40°C) SLX-16MS-1 model: -40 to +75°C (cold startup at -40°C) Contact Red Lion if wider ranges are needed.
Storage temperature range	-40 to +85 °C
PoE Models	
Power input with reverse polarity protection	10-44 VDC with no PoE output 45-52 VDC for PoE output
Switch power consumption (typical all ports active at 1000 Mbps)	4.3 W (5EG-1, all copper) typical 6.2 W (5EG-2SFP with 2 fiber) typical 66W (5EG-1) with 4 fully loaded PoE ports 53W (5EG-2SFP) with 3 fully loaded PoE ports
PoE power consumption	Up to 15.4 W per port
RJ45 pin assignments for PoE	TX/V- (3, 6); RX/V+ (1, 2)
Power input transient protection	15,000 watts peak
Power input spike Protection	5,000 watts (10 times for 10 uS)
PoE operation	Auto power management
PoE disconnect mode	DC disconnect
PoE auto-detection	Per IEEE 802.2af
PoE protection	Over-temperature, over-current, over/under-voltage and transient

Mechanical:	
Ingress protection	IP30 (SL models) IP40 (SLX models)
Packaging and protection	UL94V0 Lexan plastic for all plastic cased units. Aluminum w/ protective finish for all metal cased units.
Dimensions (L x W x H)	See mechanical diagrams for details
Weights (typical)	SL-2ES-2/3 and SL-5ES-1/2/3 in Lexan case – 4 oz (0.11 kg) SLX-3EG in metal case – 6 oz (0.17 kg) SLX-5ES-1/2/3 in metal case – 6 oz (0.17 kg) SLX-5EG-1/2SFP in metal case – 15.2 oz (0.43 kg) SLX-5MS-1/4/5 in metal case – 8 oz (0.23 kg) SL-6/8/9ES-1/2/3/4/5 in Lexan case – 6 oz (0.17 kg) SLX-6/8/9ES-1/2/3/4/5 in metal case – 8 oz (0.23 kg) SLX-8MS-1/4/5 in metal case – 10 oz (0.28 kg) SLX-8xS-6/7/8/9 in metal case – 11 oz (0.31 kg) SLX-8MG-1 without fiber transceivers – 16 oz (0.45 kg) SLX-8MG-1 with 4 fiber transceivers – 18 oz (0.50 kg) SLX-10MG-1 in metal case – 12 oz (0.34 kg) SLX-16MS-1 in metal case – 16 oz (0.45 kg) SLX-18MG-1 in metal case – 16 oz (0.46 kg)