



XPress-Pro™ SW
INDUSTRIAL
ETHERNET
SWITCHES



XPress-Pro SW Series Hardened Ethernet Switches

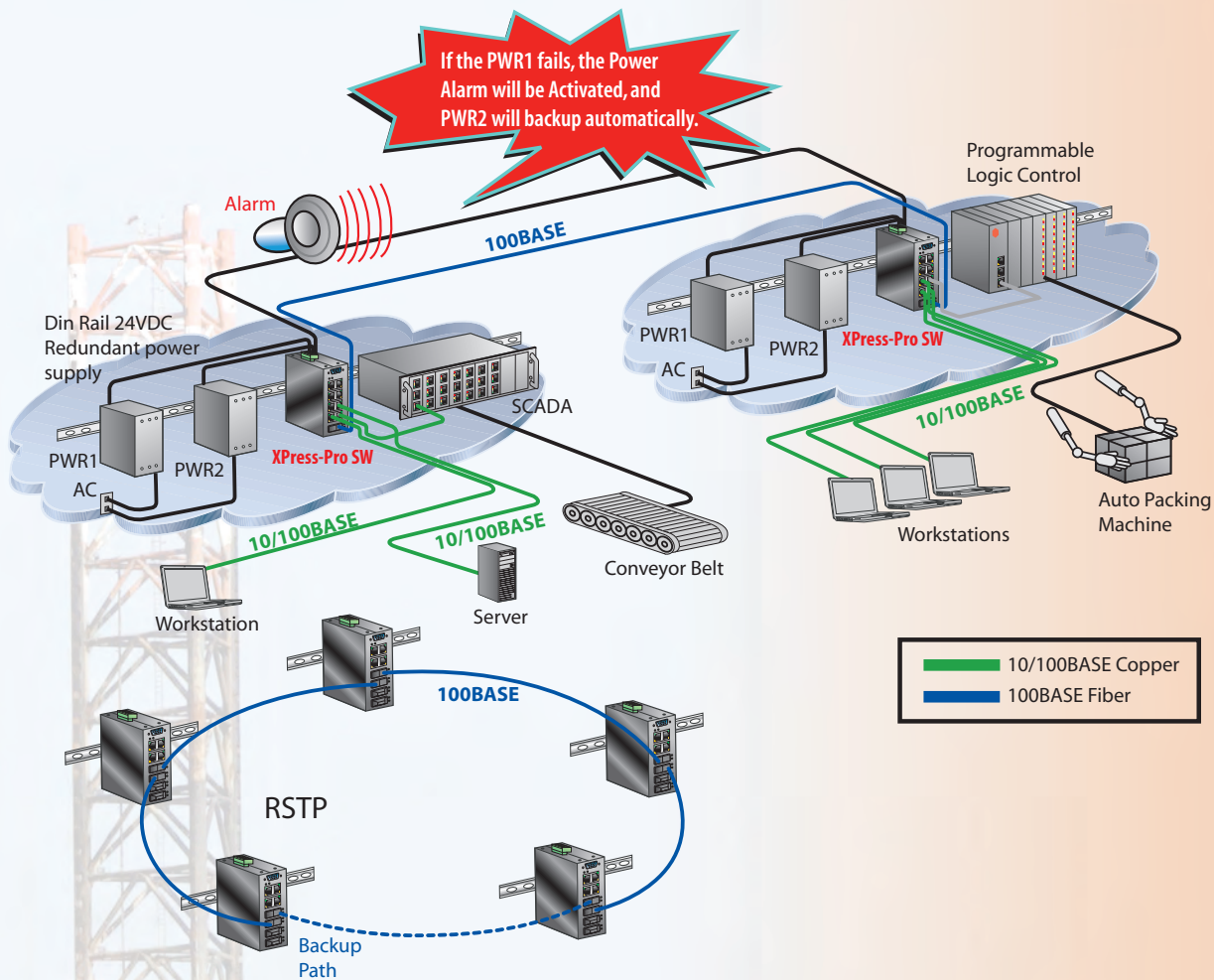
Enabling Communication for the Demanding Industrial Environment

Part of the device networking family of network-enablement products, XPress-Pro™ SW series managed and unmanaged Ethernet switches are designed to give you performance you can count on in harsh industrial environments.

Whether they're on the factory floor or in the field, XPress-Pro switches will provide flawless communication when you need it most.

Combined with our industrial device servers, this complete line of rugged, dependable and affordable switches delivers a robust industrial device networking solution.





— 10/100BASE Copper
— 100BASE Fiber

XPress-Pro 8-port models feature redundant power inputs and a relay for power failure alarms.

XPress-Pro Industrial Ethernet Switches are DIN-rail mountable and offer:

- ▶ Compliant with IEC61000-6-2 EMC generic immunity standard for the industrial environment
- ▶ Full wire-speed forwarding rate
- ▶ Alarms for power failure by relay output (8-port only)
- ▶ Fiberoptic interfaces



XPress-Pro SW Series Hardened Ethernet Switches

XPress-Pro SW 92000 Series

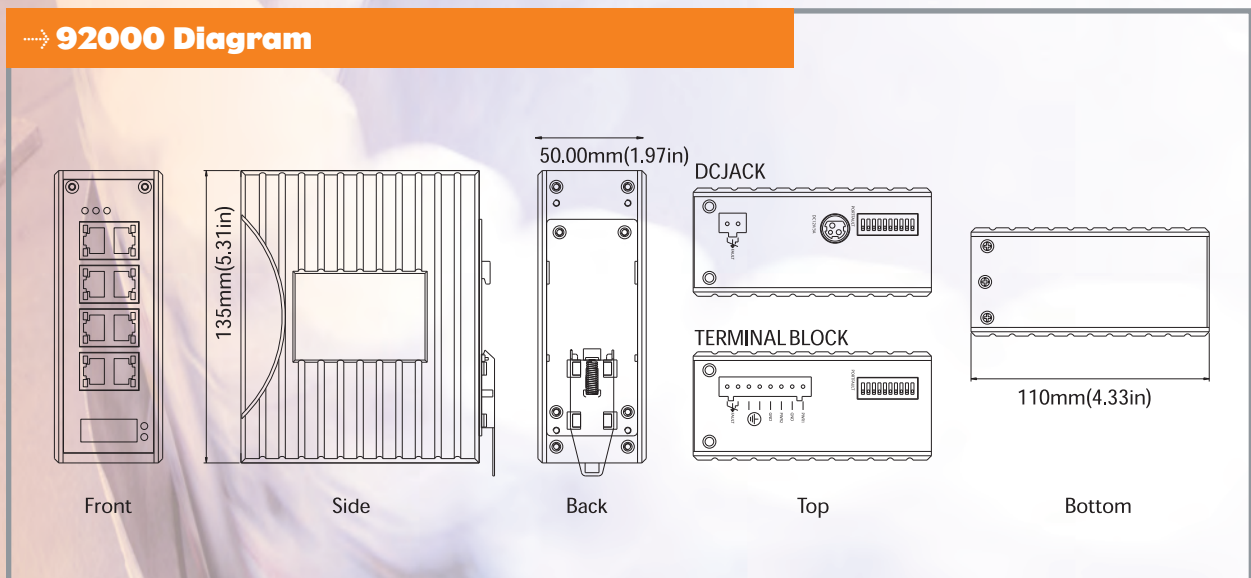
XPress-Pro SW 92000 Series

XPress-Pro SW 92000 switches offer eight 10/100 Ethernet ports and an optional fiberoptic interface. They can be DIN-rail, shelf or wall mounted, and come with dual redundant power inputs to fit applications requiring a tough, environmentally hardened Ethernet switch.



- ▶ 2048 MAC addresses
- ▶ 768 kilobit buffer memory
- ▶ Redundant 2A max, 10 to 48 VDC power inputs
- ▶ -34° to 74° C (-29° to 165° F) operating temperature range
- ▶ Hardened aluminum case
- ▶ Supports DIN-rail, panel, or rack-mounting installation
- ▶ Comply with NEMA TS1 and TS2 environmental requirements for traffic control equipment
- ▶ Alarms for power and port link failure by relay output
- ▶ UL 1604: Class 1, Division 2 classified for use in hazardous locations

92000 Diagram





XPress-Pro SW 52000 Series

The XPress-Pro SW 52000 compact, fast Ethernet switches are equipped with 5-port 10/100Base-TX or 4-port 10/100Base-TX plus a fiberoptic interface. By using standard auto-negotiation and the inclusion of auto-MDIX, Lantronix delivers a cost-effective way of integrating legacy 10 Mbps networks with 100 Mbps fast Ethernet networks.

SW 52000 TX ports auto-negotiate for 10/100 Mbps speed and auto detect full or half-duplex mode.

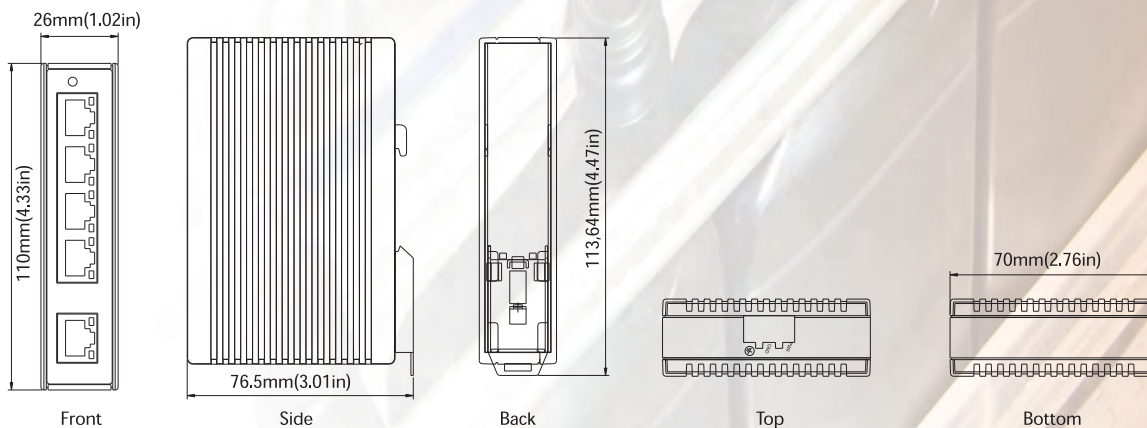
The fiber port on the SW 52012F accommodates multimode SC with a fiberoptic connection between two nodes that can reach up to two kilometers. SW 52000 series switches can be DIN-rail mounted and are equipped with terminal block power input to accommodate just about any application that requires an Ethernet switch.



- ▶ 2048 MAC addresses
- ▶ 384 kilobit buffer memory
- ▶ .1A max, 12 to 48 VDC power input
- ▶ -10° to 60° C (14° to 140° F) operating temperature range
- ▶ Industrial plastic case supports DIN-rail mounting

XPress-Pro SW 52000 Series

52000 Diagram





| XPress-Pro SW Model: | 52000 | 92000 |
|---|---|---|
| Designation | 100Base-FX | 100Base-FX |
| Typical Distance | 2 Km | 2 Km |
| Nominal Wavelength | 1310 nm | 1310 nm |
| Cable Type | 62.5/125 mm | 62.5/125 mm |
| Connector | SC | SC |
| Optical Budget | 15 dB | 15 dB |
| Serial Interface | 5-port 10/100Base-TX or 4-port 10/100Base-TX | 8-port 10/100Base-TX |
| Forward and Filtering Rate | 14,880 pps for 10 Mbps 148,810 pps for 100 Mbps | 148,810 pps for 100 Mbps 14,880 pps for 10 Mbps |
| Address Table Size | 2048 MAC addresses | 2048 MAC addresses |
| Latency | Less than 5.1 μ s | Less than 7.1 μ s |
| Network Interface | 10/100 Mbps full/half-duplex, auto negotiation, auto MDI/MDIX | 10/100 Mbps full/half-duplex, auto negotiation, auto MDI/MDIX |
| LED Indicators | Per Unit: Power Status Per Port: 10/100TX, 100FX: Link/Activity (Green), Speed (Yellow) | Per Unit: Power Status (Power 1, Power 2) Per Port: 10/100TX, 100FX: Link/Activity (Green), Speed (Yellow), Fault (Red) |
| Alarm Contact | n/a | One relay output with current 1A @ 24 VDC |
| Standards | IEEE802.3 10Base-T, IEEE802.3u 100 Base-TX/100Base-FX, IEEE802.3x | IEEE802.3 10Base-T, IEEE802.3u 100 Base-TX/100Base-FX, IEEE802.3x |
| Power | Input Voltage: 12 to 48 VDC Input Current: 0.1A max. Power Consumption: 2.4W max. | Input Voltage: 10 to 48 VDC Input Current: 1.5A max. Power Consumption: 24 VDC @ 0.55A, 18.48 W max. |
| Environmental | Operating Temperature: -10° to 60° C (-14° to 140° F) Storage Temperature: -25° to 85° C (-13° to 185° F) Humidity: 10% to 90% relative humidity (non-condensing) | Operating Temperature: -34° to 74° C (-29° to 165° F) Storage Temperature: -40° to 85° C (-40° to 185° F) Humidity: 10% to 95% relative humidity (non-condensing) |
| Packet Buffer Memory | 384 kilobit | 768 kilobit |
| Packaging | Plastic case with DIN-rail mounting | Aluminum case with DIN-rail, or panel mounting |
| Dimensions: | 25 mm W x 70 mm D x 110 mm H (0.99" W x 2.76" D x 4.33" H) | 50 mm W x 110 mm D x 136 mm H (1.97" W x 4.33" D x 5.35" H) |
| Weight: | 0.2 Kg (0.44 lbs.) | 0.8 Kg (1.76 lb) |
| Processing Types | Store-and-forward Half-duplex back-pressure and IEEE802.3x full-duplex flow control | Store-and-forward Half-duplex back-pressure and IEEE802.3x full-duplex flow control |
| Standards | IEEE802.3 10Base-T, IEEE802.3u 100 Base-TX/100Base-FX, IEEE802.3x | IEEE802.3 10Base-T, IEEE802.3u 100 Base-TX/100Base-FX, IEEE802.3x |
| Regulatory Approvals: | | |
| Emission Compliance | FCC Part 15, Class A | FCC Part 15, Class A |
| ISO | Manufactured in an ISO9001 facility | Manufactured in an ISO9001 facility |
| Safety | UL 60950 | UL 60950, EN 60950, IEC 60950, IEC 61000-6-2, UL 1604: Classified for ITE Equipment for use in hazardous locations: Class 1, Division 2 group A, B, C & D: Temp Code T4A; -25°C < Tamb < 74°C |
| CE Approval | n/a | EN55022 (CISPR22 Class A), EN55024 (CISPR24 Class A) |
| ESD Standards (IEC 61000-4-2) | n/a | Enclosure Contact: + / - 4 KV; Criteria B, Enclosure Air: + / - 8 KV; Criteria B |
| Radiated FRI Standards (IEC 61000-4-3) | n/a | Enclosure Ports: 10V/m, 80 to 1000 MHz; Criteria A |
| Burst Standards (IEC 61000-4-4) | n/a | Enclosure Ports: + / - 4 KV @ 2.5 KHz; Criteria B, DC Power Ports: + / - 4 KV; Criteria B, AC Power Ports: + / - 4 KV; Criteria B |
| Surge Standards (IEC 61000-4-5) | n/a | Signal Ports: + / - 1 KV; Line-to-earth; Criteria B, DC Power Ports: + / - 0.5 KV; Line-to-earth; Criteria B AC Power Ports: + / - 2 KV; Line-to-earth; Criteria B |
| Induced RFI Standards (IEC 61000-4-6) | n/a | Signal Ports: 10V @ 0.15 - 80 MHz; Criteria A, DC Power Ports: 10V @ 0.15 - 80 MHz; Criteria A AC Power Ports: 10V @ 0.15 - 80 MHz; Criteria A, Earth Ground Ports: 10V @ 0.15 - 80 MHz; Criteria A |
| Magnetic Field Standards (IEC 61000-4-8) | n/a | Enclosure Ports: 30 A/m @ 50, 60 Hz; Criteria A |
| Voltage Dip Standards (IEC 61000-4-11) | n/a | AC Power Ports: 30% Reduction for 0.5 period; Criteria B |
| Environmental Test Compliance | n/a | (IEC 60068-2-6) Vibration Resistance: 5G @ 150 Hz; Criterion 3 (Operation/Storage/Transport) (IEC 60068-2-27) Shock: • 5 G @ 11 ms (Half-Sine Shock Pulse; Operation) • 50 G @ 11 ms (Half-Sine Shock Pulse; Storage/Transport) (IEC 60068-2-32) Free Fall: 1 M (3.281 ft.) |
| NEMA TS1/2 Environ. Requirements for Traffic Control Equipment | n/a | Yes |
| Installation Type: | DIN Rail (mounting kit is included) | DIN Rail (mounting kit is included) Optional wall-mount kit, ordered separately (X9294PMKT-01) |



XPress-Pro Industrial Power Supply

Product Description:

30W / 1.5A DIN-rail 24 VDC industrial power supply

Input:

85 to 264 VAC (47 to 63 Hz) or 120 to 370 VDC

Output:

36W, 24 VDC, 0 to 1.5A

Overvoltage Protection:

27.6 to 32.4 Volts

Overload Protection:

105 to 160% rated output power

Protection Type:

Constant current limiting, recovers automatically

Inrush Current:

15A/115 VAC or 30A/230 VAC

Environmental:

Operating Temperature: -20° to 60° C (-4° to 140° F)

Storage Temperature: -40° to 85° C (-40° to 185° F)

Working Humidity: 10% to 95% non-condensing

Storage Humidity: 20% to 90% non-condensing

Dimensions:

78 mm W x 56 mm D x 93 mm H (3.17" W x 2.2" D x 3.66" H)

Regulatory Approvals:

Safety: UL60950-1, TUV EN60950-1 approved, design refer to EN50178

EMI conduction & radiation: EN55011, EN55022 (CISPR22) Class B

EMS immunity: EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, EN61000-6-2, EN61204-3 heavy industry level, criteria A



Ordering Information

| Part Number | Description |
|---------------------|--|
| X5200001-01 | XPress-Pro SW 52000; Industrial -10 -60°C 5-Port 10/100TX Ethernet Switch with DIN Rail |
| X52012011-01 | XPress-Pro SW 52012F; Industrial -10 -60°C 4-Port 10/100TX, 1-Port 100BaseFX MM SC Connector Ethernet Switch with DIN Rail |
| X9200001-01 | XPress-Pro SW 92000; hardened -34-74°C 8-Port 10/100TX Ethernet Switch with DIN Rail |
| X92012011-01 | XPress-Pro SW 92012F; hardened -34-74°C 8-Port 10/100TX, 1-Port 100BaseFX MM SC Connector Ethernet Switch with DIN Rail |
| X3024DR00-01 | 30 Watts 24VDC output, hardened DIN Rail power supply |
| Accessories: | |
| X9294PMKT-01 | Wall Mount Kit for 92000 series |



Make the Intelligent Choice for M2M Networking

Lantronix provides smart connectivity solutions to customers worldwide. Our solutions, comprised of embedded and external device servicers, software, and services, ensure success so organizations can accomplish more with less.

You need connectivity solutions that do more than just connect machines to machines (M2M). Why shouldn't your solution make new revenue streams possible, save money, and allow you to allocate resources more effectively? Lantronix does.

With over 20 years of thoughtful and insightful design, paired with unparalleled technical support, short implementation times, and easy integration, choosing Lantronix is the only viable choice for any forward-thinking organization. Founded in 1989, Lantronix has been manufacturing high quality products serving some of the largest medical, security, industrial and building automation, energy, transportation, retail/POS, financial, government, consumer electronics/ appliances, and IT/data center entities in the world.

Visit lantronix.com or call our sales support team at **(800) 422-7055** to schedule a demonstration and find out how quickly and easily Lantronix can add an unprecedented level of reliability to your business-critical equipment.

Lantronix Corporate Headquarters

167 Technology Drive
Irvine CA 92618
t: 800.422.7055
sales@lantronix.com

European Headquarters

t: +31 (0) 76 52 36 74 4
EMEA@lantronix.com

Asia/Pacific Headquarters

t: +852 3428 2338
asiapacific_sales@lantronix.com

Japan Headquarters

t: +81.3.6277.8802
japan_sales@lantronix.com