

# PT-7324 Series

## IEC 61850-3 22+2G-port Gigabit smart rackmount Ethernet switches



The certification logos shown here apply to some or all of the products in this section. For details, see "Regulatory Approvals" under "Specifications" below.

- > IEC 61850-3, IEEE 1613 (power substations), NEMA TS2 (traffic control systems), and EN50121-4 (railway applications) compliant
- > Port-based VLAN to enhance security/network performance
- > 802.1p priority queues, port-based QoS
- > Smart web-based management makes configuration easy
- > Universal power supply range, 12/24/48 VDC or 110/220 VDC/VAC
- > -40 to 85°C operating temperature range



### Introduction

The PowerTrans PT-7324 smart Ethernet switch is designed to meet the demands of power substation automation systems (IEC 61850-3, IEEE 1613), traffic control systems (NEMA TS2), and railway applications (EN50121-4). The PT-7324 is also equipped with smart "Class of Service" features suitable for multimedia applications, and port-based

VLAN features that can be used to segment your network without being restricted by physical connections. If you do not want to receive too many broadcast packets, the broadcast storm filtering feature will discard broadcast packets if the number of such packets exceeds a threshold in a preset period of time.

### Features and Benefits

- Port-based VLAN to ease network planning
- 802.1p priority queues and port-based QoS to increase determinism
- Broadcast storm filtering

### Specifications

#### Technology

##### Standards:

- IEEE 802.3 for 10BaseT
- IEEE 802.3u for 100BaseT(X) and 100Base FX
- IEEE 802.3ab for 1000BaseT(X)
- IEEE 802.3z for 1000BaseSX/LX/LHX/ZX
- IEEE 802.3x for Flow Control
- IEEE 802.1p for Class of Service

**Flow Control:** IEEE 802.3x flow control, back pressure flow control

#### Switch Properties

**Priority Queues:** 2

**Max. Number of Available VLANs:** 24

#### Interface

**RJ45 Ports:** 10/100BaseT(X) or 10/100/1000BaseT(X) auto negotiation speed, F/H duplex mode and auto MDI/MDI-X connection

**Fiber Ports:** 100BaseFX (SC/ST connector) or 1000BaseSFP slots

**LED Indicators:** STAT, PWR1, PWR2, FAULT, LNK/ACT, FDX/HDX, SPEED

**Alarm Contact:** 1 relay output with current carrying capacity of 3 A @ 30 VDC or 3 A @ 240 VAC

*Note: Slot 1 for a 2-port PM-7200 Gigabit Ethernet combo module, or 1 or 2-port PM-7200 fast Ethernet module.*

#### Power Requirements

##### Input Voltage:

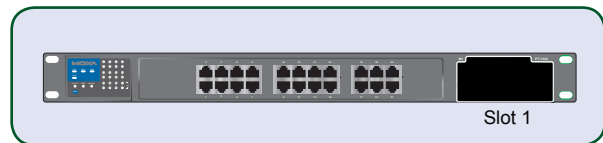
- 12/24/48 VDC (9 to 60 V)
- 110/220 VDC/VAC (88 to 300 VDC and 85 to 264 VAC)

**Input Current:** (all ports are equipped with fiber)

- Max. 0.68 A @ 24 VDC
- Max. 0.35 A @ 48 VDC
- Max. 0.17/0.11 A @ 110/220 VDC
- Max. 0.33/0.23 A @ 110/220 VAC

**Overload Current Protection:** Present

### Smart Rackmount Ethernet Switch System, PT-7324



**Connection:** 10-pin terminal blocks

**Reverse Polarity Protection:** Present

#### Physical Characteristics

**Housing:** IP30 protection

**Dimensions:** 440 x 44 x 254 mm (17.32 x 1.73 x 10.00 in)

**Weight:** 3300 g

**Installation:** 19" rack mounting

#### Environmental Limits

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

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

**Ambient Relative Humidity:** 5 to 95% (non-condensing)

#### Regulatory Approvals

**Safety:** UL60950-1, CSA C22.2 No. 60950-1, EN60950-1 (Pending)

**EMI:** FCC Part 15, CISPR (EN55022) class A

**Power Automation:** IEC 61850-3, IEEE 1613

**Maritime:** DNV (Pending), GL (Pending)

**Traffic Control:** NEMA TS2

**Rail Traffic:** EN50155/EN50121-4

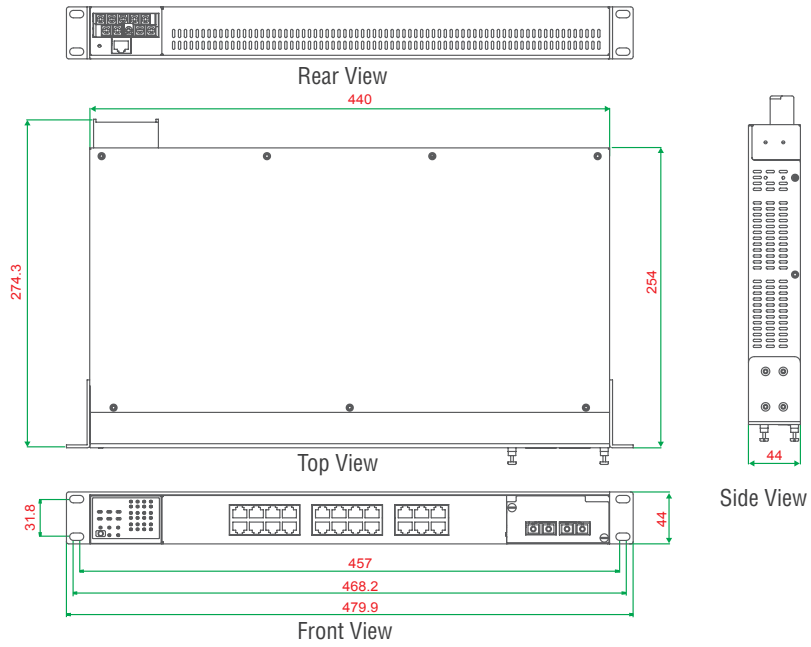
*Note: Please check Moxa's website for the most up-to-date certification status.*

#### Warranty

**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

**Dimensions (unit = mm)**



**Ordering Information**

Step 1: Select Ethernet switch system

Step 2: Select interface modules

PT-7324 with power supply



PM-7200 modules  
(Gigabit or fast Ethernet)

Note: The PT-7324 Ethernet switch system is delivered without interface module. See page 4-31 to choose PM-7200 interface modules.

**PT-7324 Smart Rackmount Ethernet Switch System**

The PT-7324 switch system consists of 4 smart rackmount Ethernet switch systems with 22 10/100BaseT(X) ports, and 1 slot for a fast Ethernet or Gigabit Ethernet module. A total of 24 or 22+2G ports can be installed, and the switch can be used in a temperature range from -40 to 85°C.

Available Models		Power Supply	
Front Cabling, Front Display	Rear Cabling, Front Display	LV: 12/24/48 VDC (9 to 60 V) (Dual power inputs)	HV: 88 to 300 VDC and 85 to 264 VAC, isolated
PT-7324-F-LV	PT-7324-R-LV	1	---
PT-7324-F-HV	PT-7324-R-HV	---	1

Note: The PT-7324 Ethernet switch systems provide 1 slot for a Gigabit Ethernet or fast Ethernet interface module. See page 4-31 to select the PM-7200 series Gigabit Ethernet and fast Ethernet interface modules that you need for your own application.

PT-7324-F series  
(Front Cabling, Front Display)



PT-7324-R series  
(Rear Cabling, Front Display)



**Gigabit/Fast Ethernet Modules for the PT-7324**

Interface Modules							
	PM-7200-2GTXSFP	PM-7200-1MSC	PM-7200-1MST	PM-7200-1SSC	PM-7200-2MSC	PM-7200-2MST	PM-7200-2SSC
Slot 1	√	√	√	√	√	√	√