



EN 50155 Switches

Moxa is an IRIS-certified company that offers a large portfolio of rugged Ethernet switches that comply with the mandatory sections of the EN 50155 standard. These products have been deployed in many rail and metro systems around the world. With our innovative solutions and technologies, we help train builders achieve overall transport safety, efficiency, and significant cost and time savings on railway operation and maintenance.



TN-5510A-8PoE-2GLSX-ODC-WV-CT-T

TN-5500A Series

8 FE with 802.3at PoE+ ports with M12 connector and 2 GE fiber ports, power input 24-110 VDC, conformal coating, -40 to 75°C operating temperature

Input/Output Interface

Alarm Contact Channels

2 x relay output in one M12 A-coded 5-pin male connector with current carrying capacity of 1 A @ 30 VDC

Ethernet Interface

10/100/1000BaseT(X) Ports, Q-ODC Fiber Connector 2

PoE Ports (10/100BaseT(X), M12 D-coded 4-pin female connector) 8

Standards IEEE 802.1D-2004 for Spanning Tree Protocol
 IEEE 802.1p for Class of Service
 IEEE 802.1Q for VLAN Tagging
 IEEE 802.1s for Multiple Spanning Tree Protocol
 IEEE 802.1w for Rapid Spanning Tree Protocol
 IEEE 802.1X for authentication
 IEEE 802.3 for 10BaseT
 IEEE 802.3ab for 1000BaseT(X)
 IEEE 802.3ad for Port Trunk with LACP
 IEEE 802.3u for 100BaseT(X) and 100BaseFX
 IEEE 802.3x for flow control
 IEEE 802.3af/at for PoE/PoE+ output
 IEEE 802.3z for 1000BaseSX/LX/LHX/ZX

Ethernet Software Features

Broadcast Forwarding IP directed broadcast, broadcast forwarding

Configuration Options Command Line Interface (CLI), Command Line Interface (CLI) through Serial/Telnet/SSH, Web Console (HTTP/HTTPS), Windows Utility

Filter 802.1Q, GMRP, GVRP, IGMP v1/v2/v3, Port-based VLAN, Static Multicast

Industrial Protocols EtherNet/IP Adapter (Slave), Modbus TCP Server (Slave)

Management Back Pressure Flow Control, DHCP Option 66/67/82, DHCP Server/Client, Flow control, HTTP, IPv4/IPv6, IOxpress, LLDP, Port Mirror, QoS/CoS/ToS, RARP, RMON, SMTP, SNMP Inform, SNMP Trap, Syslog, Telnet, Account Management

MIB Bridge MIB, Ethernet-like MIB, MIB-II, P-BRIDGE MIB, Q-BRIDGE MIB, RMON MIB Groups 1, 2, 3, 9, RSTP MIB

Redundancy Protocols Link Aggregation, MSTP, RSTP, STP, Turbo Chain, Turbo Ring v1/v2, Turbo Ring with DRC

Security

Broadcast storm protection, HTTPS/SSL,
Local Account Accessibility, TACACS+, Port
Lock, RADIUS, Rate Limit, SSH

	Time Management	IEEE 1588 PTP v1/v2, NTP Server/Client, SNTP
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Switch Properties	IGMP Groups	256
	Max. No. of VLANs	64
	VLAN ID Range	VID 1 to 4094

LED Interface	LED Indicators	STATE, PWR1, PWR2, FAULT, 10/100/1000M
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Serial Interface	Console Port	M12 A-coded male connector
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Power Parameters	Input Current	7.8 A @ 24 VDC, 1.58 A @ 110 VDC
	Input Voltage	24/36/48/72/96/110 VDC, Redundant dual inputs
	No. of Power Inputs	1
	Operating Voltage	16.8 to 137.5 VDC
	Overload Current Protection	Supported
	Power Connector	M23 connector
	Reverse Polarity Protection	Supported
Total PoE Power Budget	120 W	

Physical Characteristics	Housing	Metal
	IP Rating	IP54
	Dimensions	185 x 219.3 x 115 mm (7.28 x 8.63 x 4.53 in)
	Weight	2690 g (5.93 lb)

	Installation	DIN-rail mounting (optional), Wall mounting
	Protection	PCB conformal coating
Environmental Limits	Operating Temperature	-40 to 75°C (-40 to 167°F)
	Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
	Ambient Relative Humidity	5 to 95% (non-condensing)
	Altitude	2000 m
Standards and Certifications	EMC	EN 55032/24
	EMS	IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 20 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
	Freefall	IEC 60068-2-31
	Radio Frequency	FCC
	Railway	EN 50121-4, EN 50155, IEC 60571
	Railway Fire Protection	EN 45545-2
	Safety	IEC 60950-1, UL 61010-2-201
	Shock	IEC 60068-2-27, IEC 61373, EN 50155
	Vibration	IEC 60068-2-64, IEC 61373, EN 50155
Declaration	Green Product	RoHS, CRoHS, WEEE
MTBF	Time	486,560 hrs
	Standards	Telcordia SR332

Warranty

Warranty Period

5 years

Details

See www.moxa.com/warranty