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-5508A-8PoE-WV-CT-T

TN-5500A Series

8 FE with 802.3at PoE+ ports with M12 connector, 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	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
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

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

Serial Interface		
	Console Port	M12 A-coded male connector

Power Parameters		
	Input Current	7.6 A @ 24 VDC, 1.55 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 175.8 x 115 mm (7.28 x 6.92 x 4.53 in)
	Weight	2383 g (5.25 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**	526,372 hrs
	Standards	Telcordia SR332
Warranty	**Warranty Period**	5 years
	Details	See www.moxa.com/warranty