

Industrial Gigabit Switch

Lynx 5512

- **High performance and configurable**
 - 12 Gigabit ports, including 4 x SFP
 - Advanced WeOS support
- **Designed for demanding Edge Network applications**
 - Low power consumption, 9.6 to 60 VDC supply
 - All connectors on front
 - Ultra-robust IP40 metal housing
 - Multiple network resilience solutions
- **Robust for long service life**
 - -40 to +74 °C without ventilation holes
 - Industrial, marine and trackside type tested
- **Unique future proof industrial networking solutions¹**
 - Advanced cyber security features
 - Routing acceleration in hardware
 - IEEE 1588v2 Precision Time Protocol (PTP)



EN 50121-4
Railway Trackside

EN 61000-6-1
Residential Immunity

EN 61000-6-2
Industrial Immunity

EN 61000-6-3
Residential Emission

EN 61000-6-4
Industrial Emission

Product Description

The Lynx 5500 series is the most compact high-performance industrial Ethernet switch series on the market. It has been developed with the needs of current and future industrial data network, combining outstanding performance, durability and reliability these switches are ideal for handling big data and high bandwidth requirements typically found within transportation, manufacturing, energy, smart cities and other applications.

Integrating hardware, software and network design support tools, this next generation switch platform offers advanced capabilities, the lowest total cost of ownership and will create the most reliable and resilient networks.

The switch is engineered to maintain uninterrupted data communication, even in exceptionally harsh environments. Tested and certified to withstand extreme temperatures, vibrations and shocks, these switches only use industrial grade components which contributes towards a market leading mean time between failure (MTBF), maximized service life, and reduced operational and life cycle costs.

By providing full gigabit speed on all 12 ports, four flexible SFP ports and layer 2 and layer 3 functionality, a broad range of applications are possible. Powered by the next generation WeOS operating system, which ensures robust operation and support for an expanding range of protocols and features. The Lynx 5512 features intuitive set-up and configuration, removing the need for specialized IT support or training, and enabling easy and cost-efficient installation. In addition, recognizing the growing sophistication of cyberattacks, an extensive suite of cyber security tools is available.

The switches are also prepared for routing acceleration, extended cybersecurity and time synchronization IEEE 1588v2 applications, making them an ideal solution to meet future security and bandwidth requirements.

¹Released in 2nd phase

Specifications - Lynx 5512

Housing	
Dimensions (W x H x D)	70 x 100 x 100 mm (2.7 x 3.9 x 3.9 inches)
Housing	Full metal
Weight	690 gr

Power parameters	
Rated voltage LV	12 to 48 VDC
Operating voltage LV	8.4 to 60 VDC
Rated current	1.86 A at 12 VDC 0.54 A at 48 VDC
Isolation	Galvanic isolation to all ports

Environmental		
Operating temperature	-40 to +74°C (-40 to +165°F)	
Storage and transport temperatures	-50 to +85°C (-58 to +185°F)	
Ingress protection	IP40	
Humidity (operating)	5-95% relative humidity	
Corrosive gases	IEC 60068-2-60	
Altitude	2000 m/70 kPa	
MTBF Telcordia	Lynx-5512-F4G-T8G-LV Lynx-5512-E- F4G-T8G-LV	TBD TBD
MTBF MIL-HBDB-217F	Lynx-5512-F4G-T8G-LV Lynx-5512-E- F4G-T8G-LV	TBD TBD

Interface	Ports	Fibre SFP	Copper RJ-45
Lynx-5512-F4G-T8G-LV	12	4	8
Lynx-5512-E-F4G-T8G-LV	12	4	8
Console	Micro USB		
Micro SD	Secure Digital 2.0		
Digital I/O	1 x 4-ports detachable screw terminal		
Ethernet	12 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45 4 x 100/1000 Mbit/s, SFP		

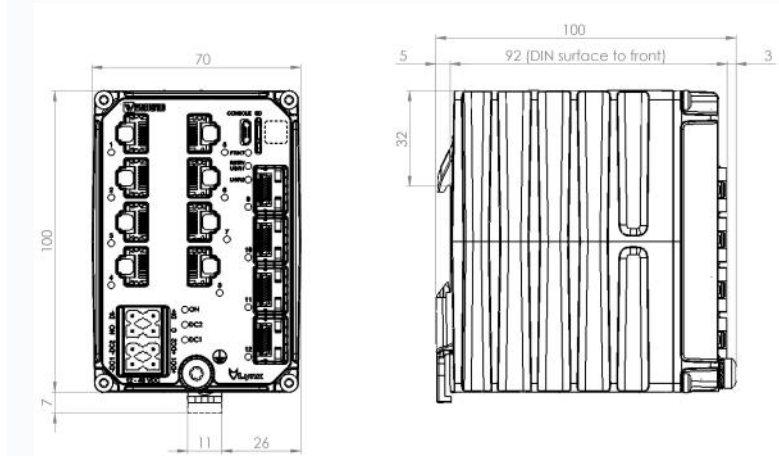
Approvals	
EMC	EN 50121-4/IEC 62236-4, Railway and telecommunications apparatus EN 61000-6-1, Immunity residential environments EN 61000-6-2, Immunity industrial environments EN 61000-6-3, Emission residential environments EN 61000-6-4, Emission industrial environments
Safety	EN/IEC 61010
Marine	DNV GL rules for classification - Ships and offshore units

Switch properties	
Number of VLAN	64
Priority queues	8

Software	
WeOS documentation	https://www.westermo.com/products/software/weos
WeConfig	https://www.westermo.com/products/software/weconfig

Warranty	
Validity	5 years

Dimensional drawing



Ordering information	
Art. no.	Description
3643-0300	Lynx 5512-F4G-T8G-LV
3643-0305	Lynx 5512-E-F4G-T8G-LV ^a

^aSelective sales approval on Lynx 5512-E versions, please contact Westermo network application team for further information

Accessories	
100 Mbit transceivers	https://www.westermo.com/products/accessories/sft-transceivers/100m-sfp-transceivers
Gbit transceivers	https://www.westermo.com/products/accessories/sft-transceivers/1gbit-sfp-transceivers

Specification WeOS

Protocols and functionality
<ul style="list-style-type: none"> Resilience and High Availability - Fast Reconfiguration of Network Topology (ring with fast failover (FRNT)), Bridging of two or more FRNT rings (Ring Coupling), FRNT Horseshoe Topology, IEEE 802.1D/802.1w (RSTP), IEEE 802.AX/802.3ad Link Aggregation (LACP and Static) Layer 2 Switching - IEEE 802.1D MAC Bridges, IEEE 802.1Q Static VLAN and VLAN Tagging, IEEE 802.1AB LLDP, IGMPv1/v2/v3 Snooping, Static Multicast MAC filters Layer 2 QoS - IEEE 802.1p Class of Service with flexible classification (VLAN tag priority, IP DSCP/ToS, Port ID), Ingress and Egress Rate limiting IP Host Services - Static IP Address, DHCP Client, DNS Client, ZeroConf (mDNS and SSDP), NTP Client (NTPv4), IP Interfaces (Ethernet, VLAN, SSL VPN^a, GRE^a, Loopback and Blackhole) IP Routing, Cyber Security and VPN^a - Static IP Routing, Floating Static Routes, Multinetting, Proxy ARP, Dynamic IP routing (OSPFv2, RIPv1/v2), VRRPv2/v3, Static Multicast Routing, Stateless NAT (1-1 NAT), SSL VPN (Client and Server, Certificate Authentication, Pre-shared Key (PSK) Point-to-Point Mode, Layer-2 and Layer-3 VPN, Layer-2 VPN bridging, Address pool and address per CN, TLS Authentication), Generic Routing Encapsulation (GRE) Train Protocols IEC 61375-2-5 (TTDP), IEC 61375-2-3 Annex E Inhibition Control Network Servers - DHCP Server (including options 1, 3, 6, 12, 15, 42, 61 and 82), DHCP Relay Agent (including options 54 and 82), DNS Proxy Server (DNS forwarder and Host records), NTP server (NTPv4) Management Tools - Westermo configuration tool WeConfig, Web interface (HTTP and HTTPS), Command Line Interface (CLI) via console port, SSHv2 and Telnet, SNMPv2c/v3, Secure Copy (SCP) for remote file upload and download, Local file management (via HTTP, FTP, TFTP and SCP), Load/save files from/to external memory, Configuration and Deployment using external memory, Tech support button, Flexible alarm and event handling system, Syslog (log files), Port monitoring SNMP MIB Support (read-only) - RFC 1213 MIB-2, RFC 2787 VRRPv2 MIB, RFC 2819 RMON MIB, RFC 2863 Interface MIB, RFC 3433 Entity Sensor MIB, RFC 3635 Ether-like Interface MIB, RFC 4133 Entity MIB, RFC 4188 Bridge MIB, RFC 4318 RSTP MIB, RFC4363 Q-BRIDGE MIB, RFC 4836 MAU MIB, RFC 6527 VRRPv3 MIB, IEEE 802.1AB LLDP MIB, IEEE 802.1AX LAG MIB, IEC 61375-2-5 TTDP MIB, WESTERMO PRIVATE DDM SFP MIB

^aAvailable in products with Layer 3 functionality