

LANCOM GS-2326P+

Managed 26-port Gigabit Ethernet switch with Power over Ethernet for reliable networks



The LANCOM GS-2326P+ is a reliable component for modern network infrastructures for any industry or application. It networks up to 26 devices with its 24 Gigabit Ethernet ports and 2 combo ports (Ethernet or fiber-optic). This switch supplies an overall output of 185 Watts and is capable of powering all PoE devices connected to it (based on IEEE 802.3af/at) without any additional power supply units or cabling. Equipped with numerous security features and a high-performance hardware platform, it is ideal for the secure and reliable networking of medium-sized networks.

- 24 Gigabit Ethernet and 2 combo ports (TP/SFP)
- PoE support based on IEEE 802.3af/at for the efficient and centralized power supply of all devices connected to it
- Energy-saving functions based on IEEE 802.3az with port deactivation if no data is transferred
- Security with configurable access control on all ports as per IEEE 802.1X
- Secure remote management through TACACS+, SSH, SSL, and SNMPv3
- Convenient integration into LANCOM monitoring systems
- IPv6 and IPv4 support for modern enterprise networks
- 5-year warranty on all components

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High power output on 26 ports

The LANCOM GS-2326P+ is equipped with 24 Gigabit Ethernet ports and 2 combo ports (Ethernet or fiber-optic). With a data throughput of 52 Gbps on the backplane, it offers full performance even under load. This makes the switch a high-performance basis for modern network infrastructures in any industry or field of application.

Centralized power supply without additional cabling

The LANCOM GS-2326P+ is a high-performance PoE switch that directly powers PoE devices connected to it; there is no need of additional power supply units or cabling. It supports the two Power-over-Ethernet standards, IEEE 802.3af and IEEE 802.3at (PoE+). It has plenty in reserve with an overall output of 185 Watts, so it efficiently supplies power to devices with high energy demands.

Efficient power-saving features

Featuring Energy Efficient Ethernet technology, the LANCOM GS-2326P+ provides optimum energy efficiency even at fast data rates. Thanks to numerous power-saving features based on the IEEE 802.3az standard, ports that are not transferring data are switched off automatically. This valuable feature saves precious resources.

Configurable access control

The LANCOM GS-2326P+ excludes rogue clients from gaining unauthorized access to the network. This is ensured by secured access control on all ports as per IEEE 802.1X (port-based, single, multi, and MAC-based).

Secure remote management

Secure communication protocols such as SSH, SSL and SNMPv3 mean that the LANCOM GS-2326P+ is ideal for professional remote network management. The switch also supports the TACACS+ protocol for authentication, authorization, and accounting. This optimized solution promises maximum security for multi-site network management and monitoring.

Integration into LANCOM monitoring systems

The LANCOM GS-2326P+ integrates seamlessly into existing LANCOM network infrastructures. Network events are easy to monitor with the LANCOM monitoring systems LANCOM Large Scale Monitor and LANmonitor.

IPv6 and IPv4 support

Thanks to the dual-stack implementation, the LANCOM GS-2326P+ operates in pure IPv4, pure IPv6, or in mixed networks. Applications such as SSL, SSH, Telnet, and TFTP can continue to be operated on IPv6 networks. Supported IPv6 features include stateless auto-configuration, the discovery of neighboring devices, and MLD snooping.

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Zero-touch deployment

Quick and easy network integration of the switch as well as automatic assignment of the configuration—without manual configuration. For installations based on the LANCOM Management Cloud, switch receives the correct configuration immediately after network authentication.

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Security

Secure Shell Protocol (SSH)	SSH for a secure remote configuration
Secure Sockets Layer (SSL)	SSL to encrypt HTTP connections; advanced security for browser-based configuration via web interface
IEEE 802.1X	IEEE 802.1X access control on all ports; RADIUS for authentication, authorization and accounting with MD5 hashing; guest VLAN; dynamic VLAN assignment
Private VLAN edge	Layer 2 isolation between clients in the same VLAN ("protected ports"); support multiple uplinks
Port security	Locking of MAC addresses to ports; limiting of the number of learned MAC addresses
IP source guard	Blocking access for illegal IP addresses on specific ports
Access control lists	Drop or rate limitation of connections based on source and destination MAC addresses, VLAN ID, IP address (IPv4/IPv6), protocol, port, DSCP/IP precedence, TCP/UDP source and destination ports, IEEE 802.1p priority, ICMP packets, IGMP packets, TCP flag
RADIUS/TACACS+	Authentication, authorization and accounting of configuration changes by RADIUS or TACACS+
Storm Control	Multicast/Broadcast/Unicast storm suppression
Isolated Group	Allows certain ports to be designated as protected. All other ports are non-isolated. Traffic between isolated group members is blocked. Traffic can only be sent from isolated group to non-isolated group.

Performance

Switching technology	Store and forward with latency less than 4 microseconds
MAC addresses	Support of max 8K MAC addresses
Throughput	Max. 52 Gbps on the backplane
Maximum packet processing	38.69 million packets per second (mpps) at 64-byte packets
Single IP Management (SIP)	Supports stacking of up to 16 devices, several switches can be managed via one ip address
VLAN	Port based and IEEE 802.1q tag based VLAN with up to 4,096 VLAN and up to 4,000 active VLANs; Supports ingress and egress packet filter in port based VLAN
Jumbo frame support	Jumbo frame support with up to 9k frames

PoE with IEEE 802.3at

Ports	24x IEEE 802.3at PoE ports (compatible to IEEE 802.3af powered devices), limited by the maximum PoE power supplied
Power	185 W total power with dynamic load balancing on all ports
Priorisation	Supports port based priority and PoE status setting

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PoE with IEEE 802.3at

Status information Monitoring via LED, displaying the actual power consumption per port in web interface

Energy efficiency (Green Ethernet)

Energy detection Energy efficiency according to IEEE 802.3az. Automatically turns off power on Gigabit Ethernet RJ-45 port when detecting link down or Idle of client. Active mode is resumed without loss of any packets when the switch detects the link up

Cable length detection Adjusts the signal strength based on the cable length. Reduces the power consumption for short cable

Layer 2 switching

Spanning Tree Protokoll (STP) / Rapid STP / Multiple STP Standard Spanning Tree according to IEEE 802.1d with fast convergence support of IEEE 802.1w (RSTP); using Multiple Spanning Tree instances by default according to IEEE 802.1s (MSTP)

Link Aggregation Control Protocol (LACP) Support of 13 groups containing up to 16 ports each according to IEEE 802.3ad

VLAN Support for up to 4K VLANs simultaneously (out of 4096 VLAN Ids); matching due to port, IEEE 802.1q tagged VLANs or MAC addresses

Voice VLAN Voice traffic is automatically assigned to a voice-specific VLAN and treated with appropriate levels of QoS

IGMP multicasts IGMP v1, v2, v3 to limit bandwidth-intensive multicast traffic to ports with requesters; supports 256 multicast groups; source-specific multicasting

IGMP querier Support of multicast domains of snooping switches in the absence of a multicast router

IGMP proxy IGMP proxy to pass IGMP messages through

Generic VLAN registration VLAN registration with GVRP according to IEEE 802.1q for automatic delivery of VLANs in bridged domains

DHCP Relay Agent Relay of DHCP broadcast request to different LANs

Supported DHCP options
 → DHCP option 66
 → DHCP option 67
 → DHCP option 82

Interfaces

Ethernet
 → 24 TP ports 10/100/1000 Mbps
 → 2 combo ports (TP/SFP) with 100/1000 Mbps (SFP) and 10/100/1000 Mbps (TP)
 → 26 concurrent Ethernet ports in total

Console port RJ45 configuration port for command line access

Management and monitoring

Management LANconfig, WEBconfig, LANCOM Management Cloud, Industry Standard CLI

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Management and monitoring

Command Line Interface (CLI)	Configuration and status display from the command line with console application and direct connection to console port, via Telnet or SSH
Monitoring	LANmonitor, LANCOM Management Cloud
Remote Monitoring	Integrated RMON software agent supports 4 RMON groups (history, statistics, alarms and events) for enhanced traffic management, monitoring and analysis
Easy-Configuration-Ports	Easy setup of ports for QoS and Security based on pre-defined configuration profiles
Port Mirroring	Traffic can be mirrored from on port to another for investigation with network analyzer or RMON probe. Up to 25 ports can be mirrored to a single mirror port. Single sessions can be selected
Security	Access rights (read/write) can be set up separately, access control list
SNMP	SNMP management via SNMPv1, v2c or v3 with support of traps. User-based security model for SNMPv3 (USM)
Diagnosis	Diagnosis from the switch with PING and cable diagnosis
Firmware update	→ Update via WEBconfig and browser (HTTP/HTTPS) → Update via TFTP and LANconfig → Dual firmware image to update during operation
Secure Copy	Securely import and export files
DHCP client	Automatic assignment of the management IP address by DHCP
SNTP	Automatic time settings with Simple Network Time Protocol (SNTP)
s-flow	Standard for monitoring of high-speed-networks. Visualization of network use, accounting an analysis to protect your network against dangers

Hardware

Weight	6,9 lbs (3,1 kg)
Power supply	Internal power supply unit (100 – 240 V, 50 – 60 Hz)
Environment	Temperature range 0 – 40° C; humidity 10 – 90%; non-condensing
Housing	Robust metal housing, 19" 1U (442 x 44 x 212 mm > W x H x D) with removable mounting brackets, network connectors on the front
Fans	1
Power consumption (max)	240 W

Software

LCOS version	based on LCOS SX 3.00
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Software

Software Lifecycle Management After discontinuation, the device is subject to the LANCOM Software Lifecycle Management. Details can be found at: www.lancom.de/lifecycle

Anti-backdoor policy Products from LANCOM are free of hidden access paths (backdoors) and other undesirable features for introducing, extracting or manipulating data. The trust seal "IT Security made in Germany" (ITSMIG) and certification by the German Federal Office for Information Security (BSI) confirm the trustworthiness and the outstanding level of security

Declarations of conformity*

Europe/EFTA CE

North America FCC/IC

Australia / New Zealand ACMA

Japan VCCI

Singapore IMDA

***) Note** The full text of the specific Declaration of Conformity is available at the following Internet address: www.lancom-systems.com/doc

Supported IEEE standards

IEEE 802.1AB Link Layer Discovery Protocol (LLDP)

IEEE 802.1AB LLDP-MED

IEEE 802.1ad Q-in-Q tagging

IEEE 802.1d MAC Bridging

IEEE 802.1d Spanning Tree

IEEE 802.1p Class of Service

IEEE 802.1q VLAN

IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)

IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)

IEEE 802.1X Port Based Network Access Control

IEEE 802.3 10Base-T Ethernet

IEEE 802.3ab 1000Base-TX Ethernet

IEEE 802.3ad Link Aggregation Control Protocol (LACP)

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Supported IEEE standards

IEEE 802.3af	Power over Ethernet (PoE)
IEEE 802.3at	Power over Ethernet Plus (PoE+)
IEEE 802.3az	Energy Efficient Ethernet
IEEE 802.3u	100Base-T Ethernet
IEEE 802.3x	Flow Control
IEEE 802.3z	1000Base-X Ethernet

Supported RFC standards

RFC 854	Telnet Protocol Specification
RFC 1213	MIB II
RFC 1215	SNMP Generic Traps
RFC 1493	Bridge MIB
RFC 1769	Simple Network Time Protocol (SNTP)
RFC 2021	Remote Network Monitoring MIB v2 (RMONv2)
RFC 2233	Interface MIB
RFC 2613	SMON MIB
RFC 2617	HTTP Authentication
RFC 2665	Ethernet-Like MIB
RFC 2674	IEEE 802.1p and IEEE 802.1q Bridge MIB
RFC 2818	Hypertext Transfer Protocol Secure (HTTPS)
RFC 2819	Remote Network Monitoring MIB (RMON)
RFC 2863	Interface Group MIB using SMIv2
RFC 2933	IGMP MIB
RFC 3019	MLDv1 MIB
RFC 3414	User based Security Model for SNMPv3
RFC 3415	View based Access Control Model for SNMP

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Supported RFC standards

RFC 3621	Power Ethernet MIB
RFC 3635	Ethernet-Like MIB
RFC 3636	IEEE 802.3 MAU MIB
RFC 4133	Entity MIBv3
RFC 4188	Bridge MIB
RFC 4251	The Secure Shell Protocol Architecture (SSH)
RFC 4668	RADIUS Authentication Client MIB
RFC 4670	RADIUS Accounting MIB
RFC 5519	Multicast Group Membership Discovery MIB
RFC 7513	DHCP Snooping

Scope of delivery

Manual	Printed Installation Guide (DE/EN)
Cable	Serial configuration cable, 1.5m
Cable	IEC power cord
19" brackets	Two 19" brackets for rackmounting

Support

Warranty	5 years, for details, please refer to the General Warranty Conditions at: www.lancom-systems.com/warranty-conditions
LANCOM support	Free technical manufacturer support as part of the LANCOM Software Lifecycle Management www.lancom.de/lifecycle
LANCOM Warranty Advanced Option S	Option for replacement of a defective device, item no. 10715

LANCOM Management Cloud

LANCOM LMC-B-1Y LMC License	LANCOM LMC-B-1Y License (1 Year), enables the management of one category B device for one year via the LANCOM Management Cloud, item no. 50103
LANCOM LMC-B-3Y LMC License	LANCOM LMC-B-3Y License (3 Years), enables the management of one category B device for three years via the LANCOM Management Cloud, item no. 50104
LANCOM LMC-B-5Y LMC License	LANCOM LMC-B-5Y License (5 Years), enables the management of one category B device for five years via the LANCOM Management Cloud, item no. 50105

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LANCOM Management Cloud

LANCOM LMC-B-10Y LMC License	LANCOM LMC-B-5Y License (10 Years), enables the management of one category B device for ten years via the LANCOM Management Cloud, item no. 50133
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Accessories*

1000Base-SX SFP module	LANCOM SFP-SX-LC1, item no. 61556
1000Base-LX SFP module	LANCOM SFP-LX-LC1, item no. 61557
LANCOM Power Cord (UK)	IEC power cord, UK plug, item no. 61650
LANCOM Power Cord (CH)	IEC power cord, CH plug, item no. 61652
LANCOM Power Cord (US)	IEC power cord, US plug, item no. 61651
LANCOM Power Cord (AU)	IEC power cord, AU plug, item no. 61653

*) Note Support for third-party accessories (SFP and DAC) is excluded and cannot be granted

Item number(s)

LANCOM GS-2326P+	61481
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