

ALLNET Switch full managed Layer2+ 28 Port • 24x GbE • 4x SFP+ • 19" • JSON API • ALL-SG8628MJ-10G

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Highlights:

- 24 ports Gigabit Layer2+ switch architecture (**ports 1~24**).
- 4 ports SFP+ 10G slots for optional GBICs compatible (ports 25~28)
- Supports SFP DDM & cable diagnostics
- Supports G.8032 ERPS, self-detection time < 20 ms
- Supports 1588 V2.0, transparent clock
- Supports port aggregation
- 4KV & overvoltage protection, 6KV contact/8KV air ESD protection
- 19"-angle or wall/table mounting possible
- NEW: LAN JSON-Java-Script-Notation API for ON/OFF via remote

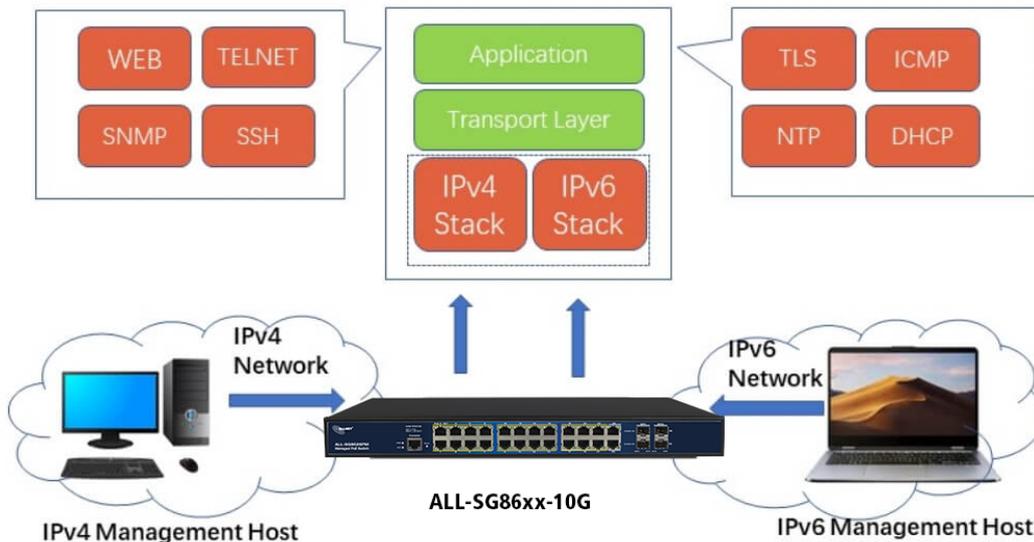
ALL-SG8628MJ-10G has 24*10/100/1000Base-T RJ45 ports and 4*10G Base-X SFP fibre slot ports with Layer 2 management. Supports desktop and 1U/19-inch rack installation.

10Gbps uplink capacity for high bandwidth applications

10G Ethernet is a major leap forward in the development of Ethernet. The 10G SFP+ sockets support dual-speed 10GBASE-SR/LR or 1000BASE-SX/LX, which means that the administrator can now flexibly select the appropriate SFP/SFP+ transceiver according to the transmission distance or speed to efficiently expand the network. It is a cost-effective solution for SME networks to achieve the maximum performance of 10G networks.

Solution for IPv6 networks

With the IPv6/IPv4 dual stack and other management features, the ALL-SG8628MJ-10G is the best choice for IP CCTV, VoIP and wireless solution providers to develop IPv6 networks. At the same time, they help SMEs to migrate their network infrastructures to the IPv6 era without additional investment.



Robust Layer 2 functions

The ALL-SG8628MJ-10G can be programmed for advanced switch management functions, such as port aggregation, Q-in-Q VLAN, Spanning Tree Protocol, QoS, bandwidth control, ERPS, IGMP/MLD snooping, etc. The ALL-SG8628MJ-10G enables the operation of a high-speed trunk that combines multiple ports.

Powerful security features

The ALL-SG8628MJ-10G provides a comprehensive access control list (ACL) to enforce security at the network edge. It can be used to restrict network access by denying packets based on source and destination IP addresses, TCP/UDP port numbers or defined typical network applications. The protection mechanism also includes 802.1x port-based and MAC-based user and device authentication. The private VLAN function can be used to prevent communication between edge ports in order to protect user privacy.

Improved security and traffic control

The ALL-SG8628MJ-10G supports the DHCP Snooping, IP Source Guard and Dynamic ARP Inspection functions to protect IP snooping from attacks and to discard ARP packets with invalid MAC addresses. The network administrator can now set up highly secure company networks with significantly less time and effort than before.

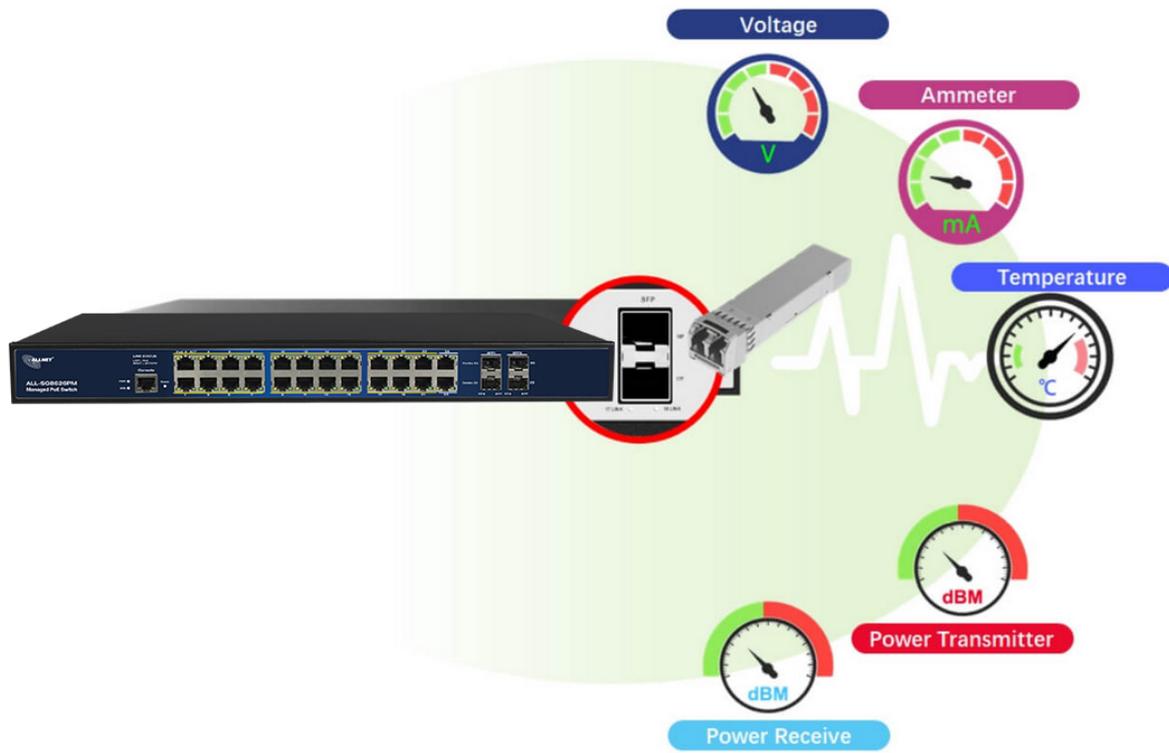
User-friendly, secure management

For efficient management, the ALL-SG8628MJ-10G managed switch series is equipped with console, web and SNMP management interfaces. With the management interface, the ALL-SG8628MJ-10G provides a user-friendly, platform-independent management and configuration option. The ALL-SG8628MJ-10G supports SNMP and can be managed via any management software based on the standard SNMP v1 or v2 protocol. At the same time, the ALL-SG8628MJ-10G offers Cisco-like commands via Telnet or the console port, so the customer does not have to learn new commands for these switches. In addition, the ALL-SG8628MJ-10G provides secure remote management by supporting SSH, SSL and SNMP v3 connections, where packet contents can be encrypted at each session.

Intelligent SFP DDM function

The ALL-SG8628MJ-10G supports the SFP-DDM (Digital Diagnostic Monitor) function, which allows the network administrator to easily monitor real-time parameters of the SFP and SFP+ transceivers, such as optical output power, optical input power, temperature, laser bias voltage and transceiver supply voltage.

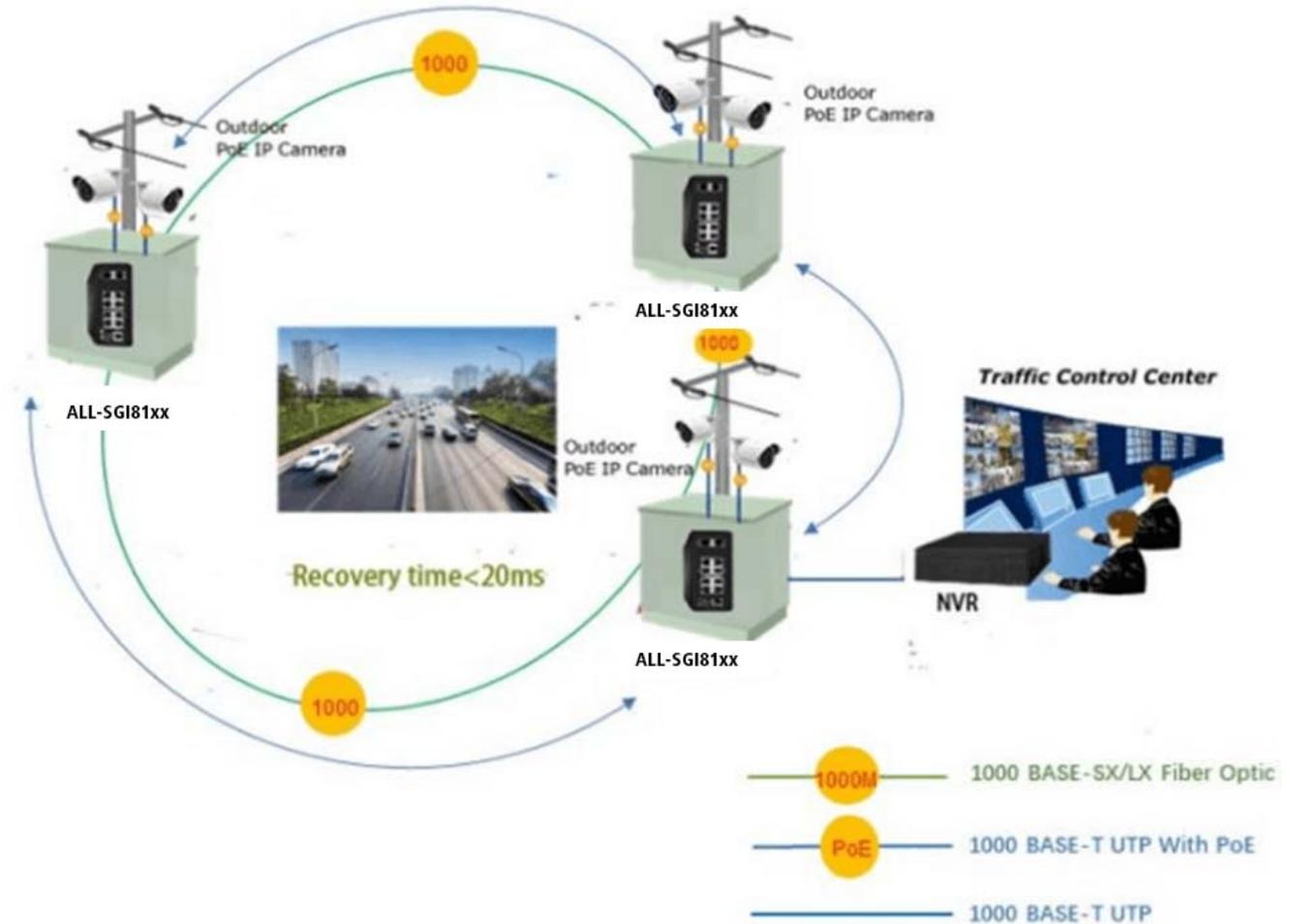
Digital Diagnostic Monitor (DDM)



Redundant ring with fast recovery for critical network applications

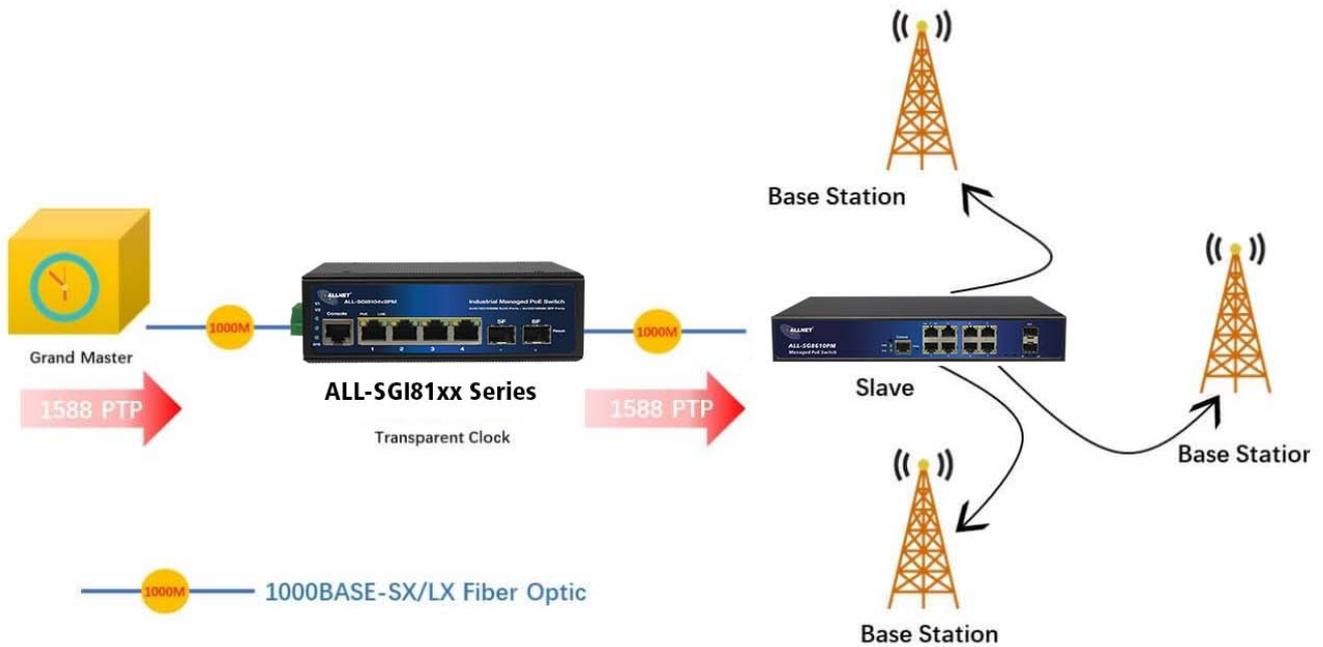
The ALL-SG8628MJ-10G supports redundant ring technology and has a strong, fast self-recovery capability to prevent interruptions and external intrusions. It integrates advanced ITU-T G.8032 ERPS technology, Spanning Tree Protocol (802.1s MSTP) and a redundant power supply system into the customer's industrial automation network to improve system reliability and uptime in harsh factory environments. In a given simple ring network, the data link recovery time can be as fast as 20 ms.

ERPS Ring for Video Transmission Redundancy



1588 time protocol for industrial computer networks

The ALL-SG8628MJ-10G is ideal for telecommunications and carrier Ethernet applications and supports MEF service provisioning and timing-over-packet solutions for IEEE 1588 and synchronous Ether



JSON-Java Script Object Notation API

With the JSON API, the ADMIN can create a special user and grant this user authorisation for JSON. We have focussed on 2 functions that we consider important.

- PoE ON/OFF & LAN Port Enabled/Disabled (for switches with PoE function)
- LAN Port Enabled/Disabled (for switches without PoE)

JSON Examples



ALLNET JSON API (json output, switching with json response)



It will ONLY be switched, NO-sensor values read!

Valid for ALLNET PoE switch ALL-SG8826PMX-10G, ALL-SG8950PM, ALL-SG8926PM.
New additions from 2024: All ALL-SG86xx and ALL-SG81xx with the suffix "J" for JSON in the name.

In this description used Device IP is "192.168.0.100".
This must be replaced by the assigned address.

Description without Activated Basic authentication. If this is enable, you must pass the Authentication in URL.
(Basic Authentication: [https:// USER: PASSWORD@192.168.0.100/xml/json.php](https://USER:PASSWORD@192.168.0.100/xml/json.php))

Call "<https://192.168.0.100/xml/json.php>".

Parameter

„id={id}“ Number or name of the switching sensor / actuator
„set={0/1/toggle}“ Switch actuator off or on
„callback={objekt}“ (optional) Values are returned as JSON object

ALLNET GmbH

```

JSON Rohdaten Kopfzeilen
Speichern Kopieren Alle einklappen Alle ausklappen 🔍 JSON durchsuchen

{
  "0": {
    "id": "1",
    "name": "Port 1",
    "unit": "--",
    "type": "1",
    "value": "0",
    "error": 0
  },
  "1": {
    "id": "2",
    "name": "Port 2",
    "unit": "--",
    "type": "1",
    "value": "0",
    "error": 0
  },
  "2": {
    "id": "3",
    "name": "Port 3",
    "unit": "--",
    "type": "1",
    "value": "0",
    "error": 0
  },
  "3": {
    "id": "4",
    "name": "Port 4",
    "unit": "--",
    "type": "1",
    "value": "0",
    "error": 0
  },
  "4": {
    "id": "5",
    "name": "Port 5",
    "unit": "--",
    "type": "1",
    "value": "0",
    "error": 0
  },
  "5": {
    "id": "6",
    "name": "Port 6",
    "unit": "--",
    "type": "1",
    "value": "0",
    "error": 0
  },
  "6": {
    "id": "7",
    "name": "Port 7",
    "unit": "--",
    "type": "1",
    "value": "0",
    "error": 0
  },
  "7": {
    "id": "8",
    "name": "Port 8",
    "unit": "--",
    "type": "1",
    "value": "0",
    "error": 0
  }
}

```



Part No.: 231180
Vendor Part No.: ALL-SG8628MJ-10G

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Advantage in combination with MSC products



Technical data:

Model	ALL-SG8628MJ-10G
Copper Ports	24-10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports
Fibre ports	4x1G/10GBASE-X SFP interfaces, supports 1G/10Gbps dual mode
Console ports	1 x RS-232-to-RJ45 serial port (115200, 8, N, 1)
Switch architecture	Store-and-forward
Switch Fabric	128 Gbps/non-blocking
Throughput	95.2Mpps @64 bytes
Address Table	32K entries
Share Data Buffer	32Mb
Jumbo Frame	9600 bytes
SDRAM	2Gb
Flash memory	128Mb
Flow control	IEEE 802.3x pause frame for full-duplex



	Back pressure for half-duplex
Reset button	>2 sec: Factory default and reset
Power supply	100~240V AC, 50/60Hz, 4A (max.)
Power consumption	Max. 60 watts/1122 BTU
LED indicators	<p>Power: Green</p> <p>Solid on- power work normal, off- power disconnected</p> <p>System: Green</p> <p>Blink-work normal, solid on- soft work abnormal, fast blink- soft upgrade</p> <p>10/100/1000T RJ45 Interfaces (Port 1 to Port 24): 1000 LNK/ACT (Green), 10/100 LNK/ACT (yellow),</p> <p>Blink- port connected with data transmission; Solid on- port connected without data transmission</p> <p>1G/10G SFP Interfaces (Port 25 to Port 28): Blue</p> <p>Blink- port connected with data transmission; Solid on- port connected without data transmission</p>
EMC	<p>Surge Immunity:</p> <p>4KV Per: IEC61000-4-5</p> <p>ESD Protection:</p> <p>ESD Level 4 Per: IEC61000-4-2</p> <p>EFT Level 4 Per: IEC61000-4-4</p>
Layer2 Functions	
Port configuration	<p>Auto-negotiation</p> <p>Flow control</p> <p>Port Mirror: TX/RX/BOTH; Many-to-1 monitor</p> <p>CPU Mirror</p> <p>Traffic statistics</p>
Link aggregation	<p>Static link aggregation</p> <p>LACP (Dynamic Trunk/Static Trunk)</p>



	<p>Algorithm based on Source/Destination MAC</p> <p>Algorithm based on Source/Destination IP</p>
MAC Table	<p>Aging Time</p> <p>Static MAC address</p> <p>Dynamic MAC address management</p>
VLAN	<p>4094 Active VLANs</p> <p>4094 VID</p> <p>802.1Q Tag VLAN</p> <p>Port VLAN</p> <p>Protocol VLAN</p> <p>MAC VLAN</p> <p>Voice VLAN</p> <p>802.1ad Q-in-Q tunnelling</p> <p>Private VLAN (Protected port)</p> <p>GARP/GVRP</p>
ACL	<p>512ACLs</p> <p>L2, L3 e L4</p> <p>Time-based ACL</p> <p>IP ACL</p> <p>MAC ACL</p> <p>MAC-IP ACL</p> <p>User-Defined ACL</p> <p>ICMPv6</p>
Spanning tree	<p>802.1D Spanning Tree Protocol (STP)</p> <p>802.1w Rapid Spanning Tree Protocol (RSTP)</p> <p>802.1s Multiple Spanning Tree Protocol (MSTP)</p> <p>Loop Guard</p> <p>Root Guard</p> <p>TC-BPDU Guard</p> <p>BPDU Guard</p> <p>BPDU Filter</p>
Ring Protection	<p><20ms G.8032 ERPS Ring</p> <p>Fast Ring</p>
Multicast	<p>1024 groups</p> <p>IGMP v1/v2/v3 Snooping, Fast Leave</p> <p>MLD Snooping</p>



	<p>Multicast VLAN IGMP filter MVR Multicast routing</p>
QOS	<p>8 mapping IDs to 8 level priority queues CoS port-based CoS 802.1p-based CoS DSCP-based Scheduling algorithms SP, WRR, SP+WRR Storm Control (Broadcast, Multicast, Unknown Unicast) Bandwidth control per port SWRR, DWRR for Scheduling Flow Redirect Precedence TOS Rate Limiting(Ingress/Egress) Stri Priority</p>
Security features	<p>Port security MAC address filter ARP Association (Manual, ARP scanning, DHCP snooping) ARP protection AAA DAI DoS (Denial of Service) Classification of packages based on: End.MAC, IP End, TCP / UDP Ports, Protocol Type; 802.1x Authentication (port-based e MAC-based) TACACS/TACACS+ Authentication RADIUS Authentication DHCP Filter Guest VLAN SSLv2/SSLv3/TLSv1 SSHv1/SSHv2 Restriction of WEB access based on: IP Address, And. MAC and Port; Port Isolation Loopback detection</p>
Management	<p>SNMP v1/v2c/v3 with Full Private MIBs RMON 4 groups WEB (HTTP/HTTPS) CLI (Telnet, Console, SSHv1/v2) Firmware upgrade via console/web/TFTP Configuration backup/reload Dual firmware LLDP Configuration export/import</p>



	<p>CDP Aware OAM (IEEE802.3ah) CFM (IEEE802.1ag) sFlow Telnet client</p>
Synchronisation, IEEE1588	Support IEEE1588v2 transparent clock
Other features	<p>DNS Client DHCP Relay DHCP Client DHCP Snooping DHCP Option 66 DHCP Option 67 DHCP Option 82 NTP/SNTP Client UPNP UDLD</p>
Maintenance	<p>Cable Diagnostics Ping SFP DDM (Digital Diagnostics Monitoring) Thermal protection System log (Local and Remote) Memory and CPU Monitoring Tracert/ tracert 6</p>
Layer 3 functions	
Static routing	<p>IPv4 Unicast: Static Routing(Software Base) IPv6 Unicast: Static Routing(Software Base)</p>
IPV6	<p>IPv6 neighbour discovery (ND) Path maximum transmission unit (MTU) discovery Internet Control Message Protocol (ICMP) version 6 TCPv6/UDPv6 Ping6 Telnet(v6) Http/Https Interface IPV6 ACL IPV6</p>
Dimension	440x240x44.5 mm
Weight	3.2 kg
Working temperature	-10 °C to 45 °C
Storage Temperature	-20 °C to 70 °C
MTBF	50,000hrs

Attributes

Attribute	Value
Anzahl Ports PoE/LAN:	0/24
Belüftung Switch:	Mit Lüfter
Einsatzort Switch:	19"
Extra Features:	JSON-PoE-API;
LAN Geschwindigkeit:	1Gbit/s
Management:	full managed
SFP Geschwindigkeit:	SFP 1Gbit;SFP+ 10Gbit;
Weight:	1 Kg
Warranty:	24.00 Months

Accessories

Part No.	Name
101189	ALLNET ALL4757 / Switch module SFP+ (mini Gbic), 10Gbit, SR/
149613	ALLNET Switch Module ALL4757-INDU SFP+(Mini-GBIC), 10Gbit
101190	ALLNET ALL4758 / Switch module SFP+ (mini Gbic), 10Gbit, LR/
149616	ALLNET Switch Module ALL4758-INDU SFP+(Mini-GBIC), 10Gbit
128848	ALLNET Switch Module ALL4760 SFP+(Mini-GBIC), 10Gbit
146282	ALLNET Switch Module ALL4767 SFP+(Mini-GBIC), 10Gbit
27947	ALLNET ALL4750 / Switch module SFP (mini Gbic), 1000Mbit, SX
128033	ALLNET Switch Modul ALL4750-INDU SFP(Mini-GBIC), 1000Mbit MM
59426	ALLNET ALL4751 / Switch module, GBIC mini module, 1000Mbit,
128034	ALLNET Switch Module ALL4751-INDU SFP(Mini-GBIC), 1000Mbit,
114334	ALLNET Switch Modul ALL4752 SFP(mini Gbic), 1000Mbit, LHX/LC
166757	ALLNET Switch Modul ALL4752-INDU SFP(Mini-GBIC), 1000Mbit, LX/LC, 20KM, Industrial, -40/+85 Grad,
59391	ALLNET ALL4753 / Switch module GBIC Mini module, 1000Mbit, L
59393	ALLNET ALL4755 / Switch module SFP (mini Gbic), 1000Mbit, ZX
136828	ALLNET Switch Module ALL4761 SFP(Mini-GBIC), 1000Mbit

Part No.	Name
193149	ALLNET Switch Modul ALL4761-INDU SFP(Mini-GBIC), 1000Mbit, WDM(Bidi)/LC, Tx1310nm/Rx1490nm, 9u, 20Km, Industrial -40/+85 Grad,
136829	ALLNET Switch Module ALL4762 SFP(Mini-GBIC), 1000Mbit
193150	ALLNET Switch Modul ALL4762-INDU SFP(Mini-GBIC), 1000Mbit, WDM(Bidi)/LC, Tx1490nm/Rx1310nm, 9u, 20Km, Industrial -40/+85 Grad,
140675	ALLNET Switch Module ALL4765 SFP(Mini-GBIC), 1000Mbit
143548	ALLNET Switch Module ALL4756 SFP(Mini-GBIC), 1000Mbit, ZX/LC
208404	ALLNET Switch Modul ALL4765-INDU SFP(Mini-GBIC), 1000Mbit, RJ45(TP), Industrial -40/+85 Grad,
75932	Patchkabel RJ45 FTP(F/UTP) 0,25m grau, CAT5e, Synergy 21,
75939	Patchkabel RJ45 FTP(F/UTP) 0,5m grau, CAT5e, Synergy 21,
75946	Patchkabel RJ45 FTP(F/UTP) 1,0m grau, CAT5e, Synergy 21,
75959	Patchkabel RJ45 FTP(F/UTP) 2m grau, CAT5e, Synergy 21,
75966	Patchkabel RJ45 FTP(F/UTP) 3m grau, CAT5e, Synergy 21,
75973	Patchkabel RJ45 FTP(F/UTP) 5m grau, CAT5e, Synergy 21,
75979	Patchkabel RJ45 FTP(F/UTP) 7,5m grau, CAT5e, Synergy 21,
75986	Patchkabel RJ45 FTP(F/UTP) 10m grau, CAT5e, Synergy 21,
76091	Patchkabel RJ45, 15m grau, CAT5e, S-FTP(SF/UTP), Synergy 21,
76029	Patchkabel RJ45, 0,25m grau, CAT5e, S-FTP(SF/UTP), Synergy 21,
76036	Patchkabel RJ45, 0,5m grau, CAT5e, S-FTP(SF/UTP), Synergy 21,
76043	Patchkabel RJ45, 1,0m grau, CAT5e, S-FTP(SF/UTP), Synergy 21,
76056	Patchkabel RJ45, 2m grau, CAT5e, S-FTP(SF/UTP), Synergy 21,
76063	Patchkabel RJ45, 3m grau, CAT5e, S-FTP(SF/UTP), Synergy 21,
76070	Patchkabel RJ45, 5m grau, CAT5e, S-FTP(SF/UTP), Synergy 21,
76077	Patchkabel RJ45, 7,5m grau, CAT5e, S-FTP(SF/UTP), Synergy 21,
76084	Patchkabel RJ45, 10m grau, CAT5e, S-FTP(SF/UTP), Synergy 21,
76091	Patchkabel RJ45, 15m grau, CAT5e, S-FTP(SF/UTP), Synergy 21,
76117	Patchkabel RJ45, CAT6 250Mhz, 0,25m grau, S-STP(S/FTP), LSZH, Synergy 21,
76124	Patchkabel RJ45, CAT6 250Mhz, 0,5m grau, S-STP(S/FTP), LSZH, Synergy 21,
76133	Patchkabel RJ45, CAT6 250Mhz, 1,0m grau, S-STP(S/FTP), LSZH, Synergy 21,
76151	Patchkabel RJ45, CAT6 250Mhz, 2m grau, S-STP(S/FTP), LSZH, Synergy 21,
76160	Patchkabel RJ45, CAT6 250Mhz, 3m grau, S-STP(S/FTP), LSZH, Synergy 21,
76169	Patchkabel RJ45, CAT6 250Mhz, 5m grau, S-STP(S/FTP), LSZH, Synergy 21,

Part No.	Name
76178	Patchkabel RJ45, CAT6 250Mhz, 7,5m grau, S-STP(S/FTP), LSZH, Synergy 21,
76187	Patchkabel RJ45, CAT6 250Mhz, 10m grau, S-STP(S/FTP), LSZH, Synergy 21,
76196	Patchkabel RJ45, CAT6 250Mhz, 15m grau, S-STP(S/FTP), LSZH, Synergy 21,
140955	TP(RJ45) POE-Tester, at/af, Endspan/Midspan, standard, Synergy 21,
141255	Netzkabel 230V Schutzkontakt CEE7(Stecker)->Kaltgeräte IEC-C13(Buchse), 1m,Black IEC Lock
141254	Netzkabel 230V Schutzkontakt CEE7(Stecker)->Kaltgeräte IEC-C13(Buchse), 2m,Black IEC Lock
141256	Netzkabel 230V Schutzkontakt CEE7(Stecker)->Kaltgeräte IEC-C13(Buchse), 3m,Black IEC Lock
191685	ALLNET Switch Modul ALL4768 SFP+(Mini-GBIC), 10Gbit Singlemode, ER/LC, bis 40Km
191686	ALLNET Switch Modul ALL4769 SFP+(Mini-GBIC), 10Gbit Singlemode, ZR/LC, bis 80Km
188424	CyberPower USV, OR-Serie, 600VA/360W, Line-Interactive, LCD, 19"/1HE, USB/RS232, IEC C13 Kaltgeräte,
188433	CyberPower USV, OR-Serie, 650VA/360W, Line-Interactive, LCD, 19"/1HE, USB/RS232, CEE7-Schutzkontakt,
188435	CyberPower USV, OR-Serie, 1000VA/600W, Line-Interactive, LCD, 19"/1HE, USB/RS232, IEC C13 Kaltgeräte
188439	CyberPower USV, OR-Serie, 1500VA/900W, Line-Interactive, LCD, 19"/1HE, USB/RS232, IEC C13 Kaltgeräte
175260	GBIC-Mini, SFP+, 10GB, TP(RJ45), 10GBASE-T, kompatibel für Intel, Intel-Code
98686	ALLNET MSR control center "ALL3500v2" incl. 4 sensor ports & WLAN for IP building automation
104126	ALLNET ALL3505 / IP Homeautomation Appliance DIN-Rail 8x I2C
134571	ALLNET ALL3419 / IP Building-Autom. 3x I2C, 1x USB, LAN/WLAN
206211	ALLNET MSR Central "ALL5000v2" incl. 16 Sensor Ports & 19" for IP Building Automation
192187	ALLNET PoE RGBW lamp with 1x MSR sensor port / LAN / WIFI *ALL-PoE-RGBW-LAMP*
234699	ALLNET Switch full managed Layer2+ zbh. Replacement bracket for ALL-SGxx 18/26/28/54 - Short version