

ALLNET Switch industrial full managed Layer2+ 20 Port GbE • PoE Budget 240W • 8x PoE at • 8x GbE • 4x SFP • DIN • Fanless • ALL-SGI8120PM

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ALLNET Switch industrial full managed Layer2+ 20 Port • 20x GbE • PoE Budget 240W • 8x PoE at • 8x GbE • 4x SFP • DIN • Fanless • ALL-SGI8120PM

Highlights:

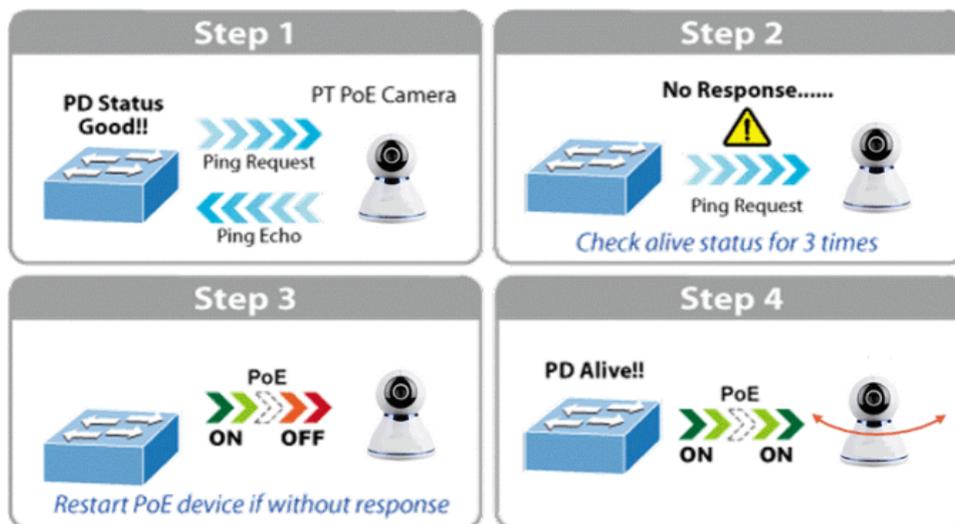
- 8x Gigabit ports with PoE AF-AT support up to 30Watt per port
- 8x Gigabit ports
- 4x SFP ports for fibre optic GBIC e.g. ALL4750/4751-INDU etc.
- PoE ports 1-8 max. PoE IEEE802.3at 30W
- Layer2+ features like 802.1Q VLAN, Port Isolation IGMP, LLDP, PoE+ Management, IP source Guard, ACLs etc.
- Supports Spanning Tree STP (802.1D) and RSTP (802.1W) and MSTP (802.1s)
- Supports PoE management such as PoE scheduling, PoE PD-alive, Port PoE Priority, Soft-Reboot PoE Non-Stop
- Supports G.8032 quick ring protocol. Self-healing <20ms
- Max. PoE budget = 240 watts
- Fanless metal housing with optimised heat dissipation
- Easy to use as desktop, wall-mounted or top-hat rail unit
- Extended temperature range from -40°C ~ +75°C

ALLNET ALL-SGI8120PM Industrial Switch is a Layer 2+ managed Gigabit PoE Switch that features 8-Port Gigabit 802.3af/at PoE + 8-Port Gigabit RJ45 + 4-Port Gigabit SFP optical port, is specially designed to build a full Gigabit backbone to transmit reliable and high-speed data in heavy industrial demanding environments and

forward data to remote network through fiber optic cabling. It comes with an IP40 rugged case and redundant power system. The industrial managed switch provides user friendly but advanced IPv6/IPv4 management interfaces and Soft-reboot PoE Non-stop function. It is the best investment for expanding industrial business or upgrading its network infrastructure.

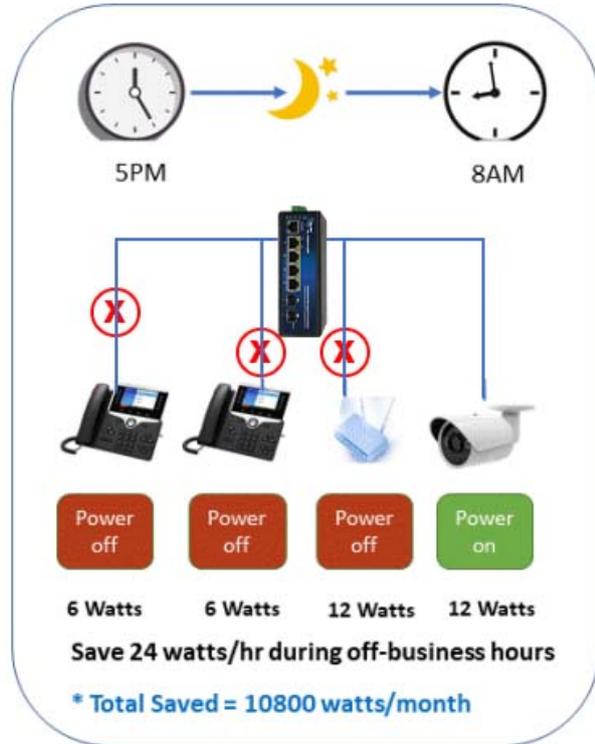
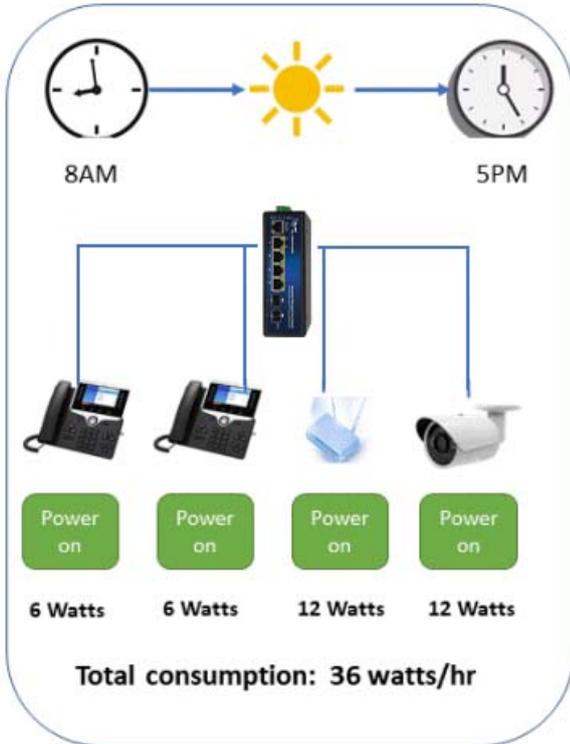
Intelligent PD–Alive Check for Frozen PDs

The ALL-SGI8112P Mindustrial PoE switch 8 ports can be configured to monitor connected PD's status in real time. Once the PD stops working and responding, the ALL-SGI8104v2PM will reboot the PoE port power and bring the PD back to work. It also greatly enhances the reliability in that the PoE port will reset the PD power, thus reducing administrator's management burden.



PoE Schedule Function for Energy Saving

For environmental protection purpose, the ALL-SGI8120PM switch Ethernet PoE can effectively control the power supply besides its capability of giving high watts power. The PoE schedule function helps to enable or disable PoE power feeding for each PoE port during specified time intervals and it is a powerful function to help SMBs or enterprises save power and money.



1000 BASE-T UTP With PoE

Scheduled PD Re-starting

The ALL-SGI8120PM smart switch PoE allows each of the connected PoE IP cameras or PoE wireless access points to reboot at a specific time each week. Therefore, it will reduce the chance of IP camera or AP crash resulting from buffer overflow.



Fast Recovery Redundant Ring for Critical Network Applications

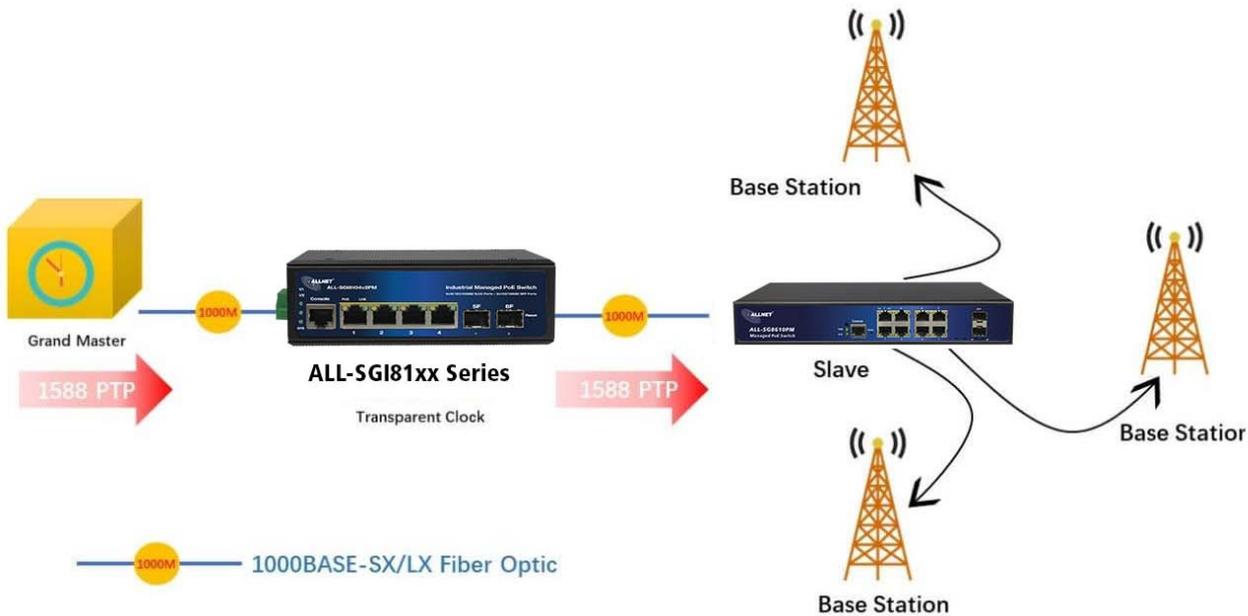
The ALL-SGI8120PM supports redundant ring technology and features strong, rapid self-recovery capability to prevent interruptions and external intrusions. It incorporates advanced ITU-T G.8032 ERPS technology, Spanning Tree Protocol (802.1s MSTP), and redundant power input system into customer's industrial automation network to enhance system reliability and uptime in harsh factory environments. In a certain simple Ring network, the recovery time of data link can be as fast as 20ms.

ERPS Ring for Video Transmission Redundancy



1588 Time Protocol for Industrial Computing Networks

The ALL-SGI8120PM is ideal for telecom and Carrier Ethernet applications, supporting MEF service delivery and timing over packet solutions for IEEE 1588 and synchronous Ethernet.



Strong Layer 2 Features

The ALL-SGI8120PM layer 2 Ethernet switch can be programmed for advanced Layer 2 switch management functions such as dynamic port link aggregation, 802.1Q tagged VLAN, Q-in-Q VLAN, private VLAN, Multiple Spanning Tree Protocol (MSTP), QoS, bandwidth control, IGMP snooping and MLD snooping. Via the aggregation of supporting ports, the ALL-SGI8120PM allows the operation of a high-speed trunk group that comes with multiple ports and supports fail-over as well.

Efficient and Various Management Methods

For efficient management, the ALL-SGI8120PM is equipped with console, Web and SNMP management interfaces.

With the built-in Web-based management interface, it offers an easy-to-use, platform-independent management and configuration facility.

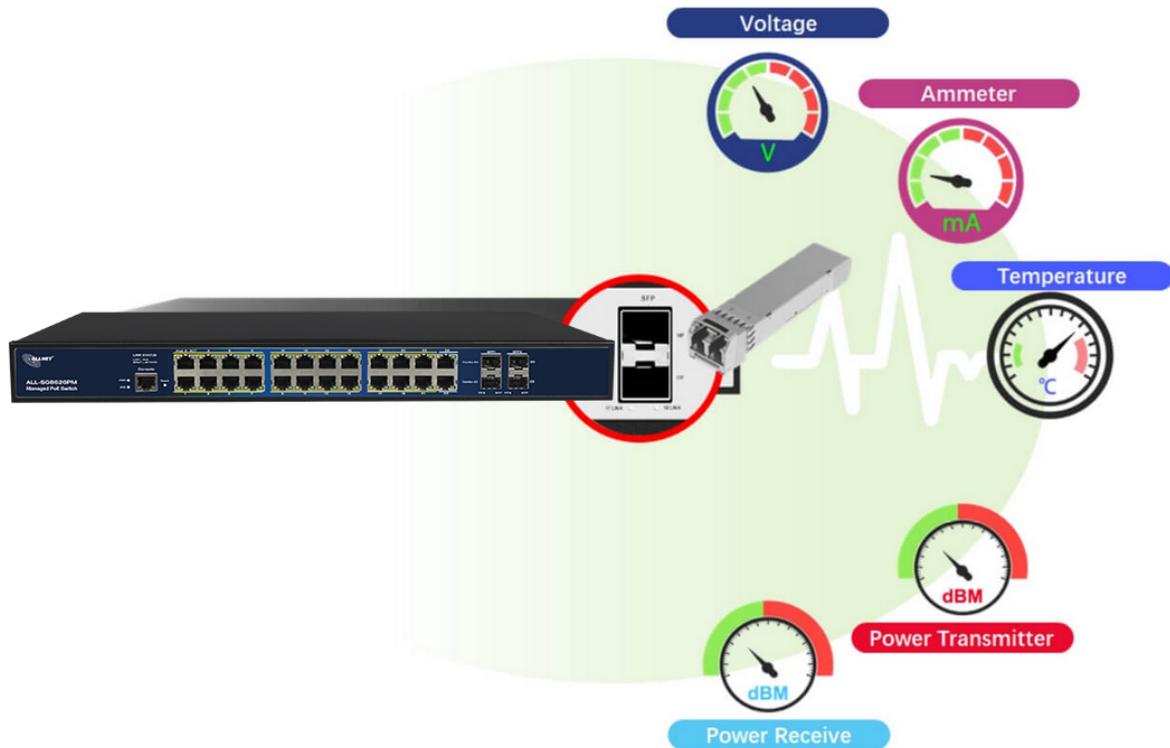
For text-based management, it can be accessed via Telnet and the console port.

For standard-based monitor and management software, it offers SNMPv3 connection which encrypts the packet content at each session for secure remote management.

Intelligent PoE Switch SFP DDM Function

The ALL-SGI8120PM supports SFP-DDM (digital diagnostic monitor) function that greatly helps network administrator to easily monitor real-time parameters of the SFP transceivers, such as optical output power, optical input power, temperature, laser bias current, and transceiver supply voltage.

Digital Diagnostic Monitor (DDM)



Technical Details:

Model	ALL-SGI8120PM
Copper Ports	16-10/100/1000BASE-T RJ45 auto-sensing ports
Fiber Ports	4-100/1000BASE-T SFP interfaces, supports 100/1000Mbps dual mode
PoE Ports	8-802.3af/802.3at PoE Injector Ports
Console Ports	1 x RS-232-to-RJ45 serial port (115200, 8, N, 1)
Switch Architecture	Store-and-Forward
Switch Fabric	40Gbps/non-blocking
Throughput	29.76Mpps @64 bytes
Address Table	8K entries
Share Data Buffer	4.1 Mb
Jumbo Frame	9216 Bytes
SDRAM	1Gb
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	48 ~ 57 VDC, 50/60Hz, Dual DC with PoE 12~55VDC without PoE function
PoE Standards	IEEE 802.3af Power over Ethernet/PSE IEEE 802.3at Power over Ethernet Plus/PSE
PoE Power Supply Type	Per Port 52V DC, 300mA. Max. 15.4 watts (IEEE 802.3af) Per Port 52V DC, 600mA. Max. 30 watts (IEEE 802.3at)
LED Indicators	Power: Green Solid on--power work normal, off--power disconnected System: Green Blink--work normally, solid on--soft work abnormal, fast blink--soft upgrade PoE: Yellow Solid on--PoE work normally, Off--PoE doesn't work, Blink--PoE overload 10/100/1000T RJ45 Interfaces (Port 1 to Port 16): 1000 LNK/ACT (Green), Blink--port connected with data transmission; Solid on--port connected without data transmission 100/1000Mbps SFP Interfaces (Port 17 to Port 20): Green Blink- port connected with data transmission; Solid on- port connected without data transmission
EMC	Surge Immunity: 6KV Per: IEC61000-4-5 ESD Protection: ESD Level 4 Per: IEC61000-4-2; EFT Level 4 Per: IEC61000-4-4
Dimension	165*145*68mm
Weight	1.5kg
Working Temperature	-40°C to 75°C
Storage Temperature	-40° to 80°C



MTBF	50,000hrs
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Layer 2 functions

Port configuration	<p>Auto-negotiation Flow Control</p> <p>Port Mirror: TX/RX/BOTH; Many-to-1 monitor CPU Mirror</p> <p>Traffic statistics</p>
Link Aggregation	<p>Static link aggregation LACP(Dynamic Trunk/Static Trunk)</p> <p>Algorith 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 Protocol VLAN MAC VLAN</p> <p>Voice VLAN</p> <p>802.1ad Q-in-Q tunneling Private VLAN (Protected port) GARP/GVRP</p>
ACL	<p>256ACLs L2, L3 e L4</p> <p>Time-based ACL IP ACL</p> <p>MAC ACL MAC-IP ACL</p> <p>User-Defined ACL</p> <p>ICMPv6</p>
Spanning tree	<p>802.1D Spanning Tree Protocol (STP) 802.1w Rapid Spanning Tree Protocol (RSTP)</p> <p>802.1s Multiple Spanning Tree Protocol (MSTP) Loop Guard</p>



	<p>Root Guard</p> <p>TC-BPDU Guard BPDU Guard</p> <p>BPDU Filter</p>
Ring Protection	<p><20ms G.8032 ERPS Ring</p> <p>Fast Ring</p>
Multicast	<p>256 groups</p> <p>IGMP v1/v2/v3 Snooping, Fast Leave MLD Snooping</p> <p>Multicast VLAN IGMP filter MVR</p> <p>Multicast Routing</p>
QOS	<p>8 mapping IDs to 8 level priority queues CoS port-based</p> <p>CoS 802.1p-based</p> <p>CoS DSCP-based</p> <p>Scheduling algorithms SP, WRR, SP+WRR</p> <p>Storm Control (Broadcast, Multicast, Unknown Unicast) Bandwidth control per port</p> <p>SWRR, DWRR for Scheduling Flow Redirect</p> <p>Precedence TOS</p> <p>Rate Limiting(Ingress/Egress) Stri Priority</p>
Security Features	<p>Port Security</p> <p>MAC address filter</p> <p>ARP Association (Manual, ARP scanning, DHCP snooping) ARP Protection</p> <p>AAA DAI</p> <p>DoS (Denial of Service)</p> <p>Classification of packages based on: End.MAC, IP End, TCP / UDP Ports, Protocol Type;</p> <p>802.1x Authentication (port-based e MAC-based) TACACS/TACACS+ Authentication</p>



	<p>RADIUS Authentication DHCP Filter</p> <p>Guest VLAN SSLv2/SSLv3/TLSv1 SSHv1/SSHv2</p> <p>Restriction of WEB access based on: IP Address, And. MAC and Port; Port Isolation</p> <p>Loopback detection</p>
Management	<p>SNMP v1/v2c/v3 with Full Private MIBs RMON 4 groups</p> <p>WEB (HTTP/HTTPS)</p> <p>CLI (Telnet, Console, SSHv1/v2) Firmware upgrade via console/web/TFTP Configuration Backup/Reload</p> <p>Dual Firmware LLDP</p> <p>Configuration Export/Import CDP Aware</p> <p>OAM (IEEE802.3ah) CFM (IEEE802.1ag)</p> <p>sFlow</p>
Synchronization, IEEE1588	Support IEEE1588v2 transparent clock
Other Features	<p>DNS Client</p> <p>DHCP Relay</p> <p>DHCP Client</p> <p>DHCP Snooping</p> <p>DHCP Option 66</p> <p>DHCP Option 67</p> <p>DHCP Option 82</p> <p>NTP/SNTP Client</p> <p>UPNP</p> <p>UDLD</p>
PoE management	<p>Total PoE power budget control</p> <p>Per port PoE function enable/disable</p> <p>PoE admin-mode control</p> <p>PoE port power feeding priority</p> <p>Per PoE port power limitation</p> <p>PD classification detection</p> <p>PD alive check</p> <p>PoE schedule</p> <p>Soft-reboot PoE Non-stop</p>
Maintenance	<p>Cable Diagnostics</p> <p>Ping</p>

	SFP DDM (Digital Diagnostics Monitoring) Thermal protection System log (Local and Remote) Memory and CPU Monitoring
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Layer 3 functions

Static Routing	IPv4 Unicast: Static Routing(Software Base) IPv6 Unicast: Static Routing(Software Base)
IPV6	IPv6 neighbor 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

Attributes

Attribute	Value
Anzahl Ports PoE/LAN:	8/8
Belüftung Switch:	Lüfterlos
Einsatzort Switch:	Industrial DIN
LAN Geschwindigkeit:	1Gbit/s
Management:	full managed
PoE Budget:	<300 Watt
PoE Port Leistung:	30W at
SFP Geschwindigkeit:	SFP 1GBit
SFP Port Anzahl:	4
Weight:	1,5 Kg
Warranty:	36.00 Months

Accessories



Part No.	Name
221804	ALLNET 19"Wandgehäuse, 6HE, T488mm, Lichtgrau, IP55, SO-Serie, incl. 2-Fach Lüftereinheit
193040	ALLNET 19"Wandgehäuse, 9HE, T488mm, Lichtgrau, IP55, SO-Serie, incl. 2-Fach Lüftereinheit
200364	ALLNET 19"zbh. Gerätehalter für Hutschiene/DIN-Rail Geräte, T150mm/5HE, Lichtgrau, Frontmontage,
219493	ALLNET DIN-RAIL wall mount enclosure, T220mm, light gray, IP66, SP, 16x M25 ALL-DIN-101-AC
219373	ALLNET DIN-RAIL Wandgehäuse, T223mm, Lichtgrau, IP55, SO-DIN-Serie,
219572	ALLNET DIN-RAIL Wallmount/PoE Smart-Managed Switch T220mm, Light Gray, IP66, SP, ALL-DIN-SGI8012PM
144991	ALLNET ALL-PR2012P-E / PoE Outdoor IP67 Repeater AT - AT
189128	ALLNET PoE 2x Extender Repeater Outdoor Switch IP67
134034	ALLNET ALL-B100-24VDC / Power-Booster 24VDC to 48~55VDC 90W
128033	ALLNET Switch Modul ALL4750-INDU SFP(Mini-GBIC), 1000Mbit MM
128034	ALLNET Switch Module ALL4751-INDU SFP(Mini-GBIC), 1000Mbit,
166757	ALLNET Switch Modul ALL4752-INDU SFP(Mini-GBIC), 1000Mbit, LX/LC, 20KM, Industrial, -40/+85 Grad,
193149	ALLNET Switch Modul ALL4761-INDU SFP(Mini-GBIC), 1000Mbit, WDM(Bidi)/LC, Tx1310nm/Rx1490nm, 9u, 20Km, Industrial -40/+85 Grad,
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
208404	ALLNET Switch Modul ALL4765-INDU SFP(Mini-GBIC), 1000Mbit, RJ45(TP), Industrial -40/+85 Grad,
105684	ALLNET ALL95112 / 12Port Overvoltage protection TP/ALL-IP
99305	ALLNET / ALL95100 TP Cat 6 / PoE Surge arrester
198028	ALLNET TP Cat 6 Überspannungs-/Blitzschutz Surge Protector A
140523	Mean Well power supply - 48V 75W DIN rail, narrow
140523	Mean Well power supply - 48V 75W DIN rail, narrow
140522	Mean Well power supply - 48V 120W DIN rail, narrow
131244	Mean Well power supply - 48V 240W DIN rail
146994	Mean Well Power Supply - 48V 480W DIN Rail
146996	Mean Well Power Supply - 48V 960W DIN Rail
140955	TP(RJ45) POE-Tester, at/af, Endspan/Midspan, standard, Synergy 21,



Part No.: 207417
Vendor Part No.: ALL-SGI8120PM

Part No.	Name
193972	TP-TP coupler, CAT6A, socket, 1:1, 8-pin, RJ45, Security-Network coupler, drop socket, PoE capable, up to 10 Gbit (ABS housing) - ALL-RJ45-Magnet-V2