

## ALLNET Switch smart managed Layer2 54 Port • 48x 1 GbE • PoE Budget 800W • 48x PoE at • 6x SFP+ • 19" • ALL-SG8454PM-10G

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### EAN CODE



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### Highlights:

- 48 port Gigabit non-blocking switch architecture + 6 SFP+ Mini-GBIC slots = Total 52 ports
- Supports NWay protocol for speed (10/100/1000Mbps) and duplex mode (half/full) auto-detection
- Switch capacity up to 216Gbps
- 32K MAC address table
- 12K bytes jumbo frames
- 2x 480W power supply built in to provide max. 800W PoE power
- 4x smart fans installed

Discover the ALLNET Smart Managed 48-Port Gigabit Switch - your ultimate solution for network performance enhancement and PoE provisioning!

With the ALLNET ALL-SG8454PM-10G Switch, you'll reach new heights in network performance and management. This intelligent, managed Gigabit switch comes equipped with 48 ports for lightning-fast connections and features 6 SFP+ Mini-GBIC slots, providing you with a total of 52 versatile connectivity options.

### Unmatched Speed and Flexibility:

Our switch architecture offers an impressive non-blocking Gigabit connection. With support for the NWay protocol, you can automatically detect speeds of 10/100/1000Mbps and the desired duplex mode (half or full duplex), allowing for effortless adaptation.



Part No.: 215264  
Vendor Part No.: ALL-SG8454PM-10G

### **Impressive Capacity and Management:**

This switch offers an astonishing capacity of up to 216Gbps, providing you with ample headroom for seamless data transfers and network activities. The integrated 32K MAC address table ensures your network runs smoothly, and support for 12K-byte jumbo frames further enhances efficiency.

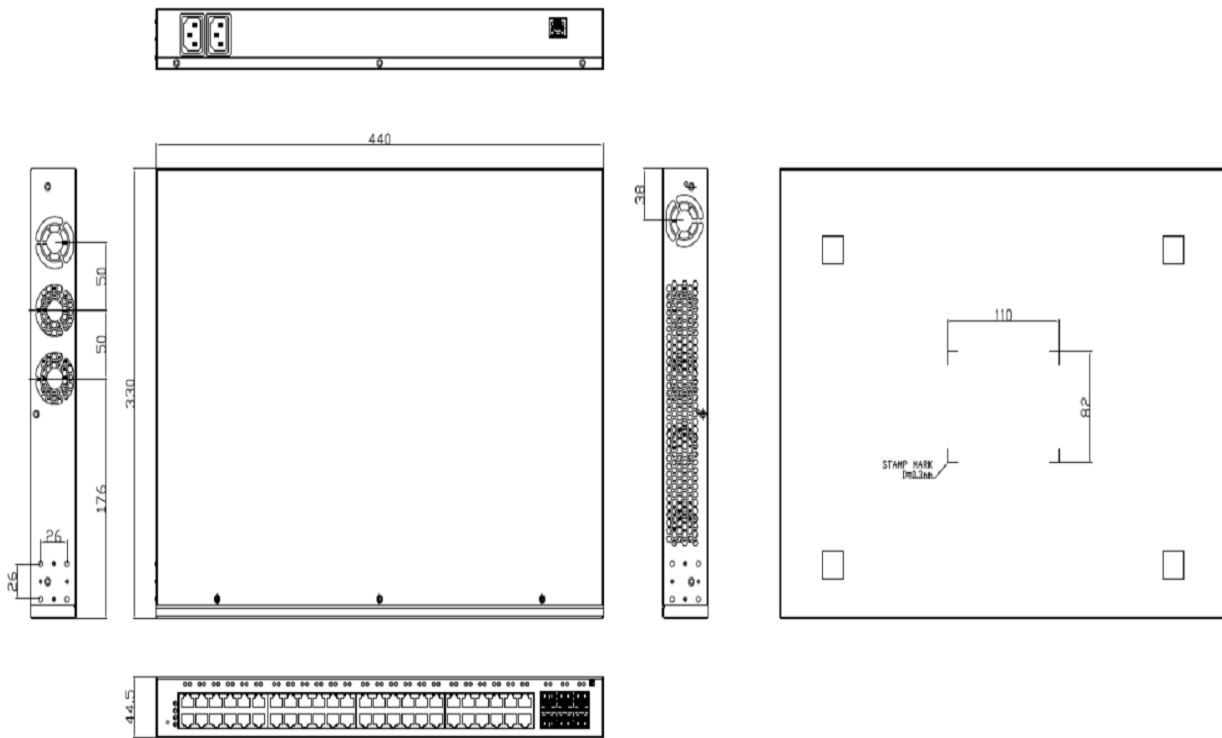
### **PoE Power and Cooling:**

Thanks to the 2 built-in 480W power supplies, you can deliver up to 800W of PoE power to effortlessly support your PoE-enabled devices. Additionally, the switch features 4 smart fans that ensure optimal cooling, keeping your network reliable even under heavy loads.

The ALLNET ALL-SG8454PM-10G is the perfect choice to take your network to the next level. Maximum performance, intelligent management, and top-notch PoE provisioning make this switch the ideal selection for businesses valuing peak performance and flexibility.

Invest in the future of your network with the ALLNET Smart Managed 48-Port Gigabit Switch - your gateway to modern network technology!

### **Mechanical Drawings:**



## Technical Details:

## Hardware Specs:

| Items          | Specifications   |
|----------------|--|
| Model No.      | ALL-SG8454PM-10G   |
| Key Components | <ol style="list-style-type: none"> <li>1. RTL9311+RTL8218Dx6</li> <li>2. GD32E230G8U6TR + RTL8238Bx6</li> <li>3. Flash IC: MXIC 32M Byte</li> <li>4. DDR: 2G bits</li> </ol> |



|                          |  |
|--------------------------|--|
| <p><b>I/O ports</b></p>  | <p>48x GbE ports, RJ45</p> <p>6 x 10G ports, SFP+</p> <p>Reset Button: reset to default setting, re-start system</p> <p>Console port by RJ45 type</p>  |
| <p><b>PoE ports</b></p>  | <p>Port# 1~ 48</p> <p>IEEE802.3at, IEEE802.3af</p>   |
| <p><b>LED Define</b></p> | <p>PWR: Green LED</p> <ul style="list-style-type: none"> <li>• Off: power off or fail</li> <li>• On: power on</li> </ul> <p>SYS: Green LED</p> <ul style="list-style-type: none"> <li>• Off: power off or fail</li> <li>• On: system is ready</li> <li>• Blinking: system booting up</li> </ul> <p>Alert: Red LED</p> <ul style="list-style-type: none"> <li>• Off: Switch is normal condition</li> <li>• On: Alarm for system failure because of overheat, wrong voltage.</li> </ul> <p>PoE Max: Green LED</p> <ul style="list-style-type: none"> <li>• Off: No over PoE max power Alert</li> <li>• On: Over PoE max power Alert</li> </ul> <p>1-48 Port LED:</p> <p>Link/ACT:</p> <ul style="list-style-type: none"> <li>• Off: port disconnected or link fail</li> <li>• Green on: 1000Mbps connected</li> <li>• Amber on: 10/100Mbps connected</li> <li>• Blinking: sending or receiving data</li> </ul> <p>49-52 port LED:</p> <p>SFP+:</p> <ul style="list-style-type: none"> <li>- Off: disconnected or fail</li> <li>- Blue: 10Gbps connected</li> </ul> |



|                           |  |
|---------------------------|--|
|                           | <p>- Green: 1000Mbps connected</p> <p>- Blinking: data transmitting</p> <p>PoE: Green LED</p> <ul style="list-style-type: none"> <li>• Off: PoE power output off</li> <li>• Green on: PoE power output on</li> </ul> <p>Slide Switch: Swap Port LED &amp; PoE LED display</p>  |
| <b>HW feature</b>         | <p>IEEE802.3 10BASE-T</p> <p>IEEE802.3u 100BASE-TX</p> <p>IEEE802.3ab 1000BASE-T</p> <p>IEEE802.3ae SFP+</p> <p>IEEE802.3az EEE</p> <p>MAC address Table: 32K</p> <p>Packet buffer size: 16Mbit</p> <p>Jumbo Frame: 12K bytes</p> <p>216Gbps switching capacity</p> <p>Forwarding rate: 129.3Mpps (64-byte package size)</p> |
| <b>Data Transfer Rate</b> | <p>Ethernet:10 Mbps (half duplex),20 Mbps (full duplex)</p> <p>Fast Ethernet:100 Mbps (half duplex),200 Mbps (full duplex)</p> <p>Giga Ethernet:2000 Mbps (full duplex)</p> <p>10 Gigabit Ethernet:20 Gbps (full duplex)</p>   |
| <b>System Monitor</b>     | <p>HW Monitor IC: ADT7476</p> <p>1. Voltage Monitor</p> <ol style="list-style-type: none"> <li>1. Input Voltage: 12V (+/-7% Alarm Threshold)</li> <li>2. I/O Voltage: 3.3V (+/- 5% Alarm Threshold)</li> <li>3. DDR Voltage: 1.5V (+/- 5%)</li> </ol>  |



|                                  | <p>Alarm Threshold)</p> <p>4. PHY Voltage:<br/>1.1V (+/- 5%<br/>Alarm Threshold)</p> <p>5. MAC<br/>Voltage:1.0V (+/-<br/>5% Alarm<br/>Threshold)</p> <p>2. Temperature Monitor<br/>1. BOARD: 0~80°C<br/>2. MAC: 0~85°C<br/>3. PHY: 0~85°C</p>   |  |  |  |  |   |         |       |                |   |          |      |               |   |          |      |               |   |          |       |                |   |          |     |                 |
|----------------------------------|---|--|--|--|--|---|---------|-------|----------------|---|----------|------|---------------|---|----------|------|---------------|---|----------|-------|----------------|---|----------|-----|-----------------|
| <b>Power Input</b>               | <p>Internal power supply</p> <p>Input: 90~264VAC/47~63Hz, Two AC connector</p> <p>Output: 480WX2</p>  |  |  |  |  |   |         |       |                |   |          |      |               |   |          |      |               |   |          |       |                |   |          |     |                 |
| <b>PoE Power Budget</b>          | 800W  |  |  |  |  |   |         |       |                |   |          |      |               |   |          |      |               |   |          |       |                |   |          |     |                 |
| <b>PoE power pin-out</b>         | Alternative A (Pin 1,2/3,6)   |  |  |  |  |   |         |       |                |   |          |      |               |   |          |      |               |   |          |       |                |   |          |     |                 |
| <b>PoE Output power capacity</b> | <p>Maximum output :30W per each port</p> <ol style="list-style-type: none"> <li>1. Compliant with IEEE802.3af/at standard, Following IEEE802.3at/at to support PoE or PoE+</li> <li>2. Automatically discover the connection of PD device and immediately sends power to it</li> <li>3. Auto disable port if the port current is over 700mA or short happens</li> <li>4. Priority can be configured and default setting is lower port NO. has high priority</li> <li>5. The maximum power used by power devices is defined by the following classification. When Port works in Auto Mode, the output port power limit will be associated with PD classification Value.</li> </ol> <table border="1"> <thead> <tr> <th>Class</th> <th>Usage</th> <th>Minimum Power Levels Output at the PSE</th> <th>Maximum Power Levels at the Powered Device</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Default</td> <td>15.4W</td> <td>0.44 to 12.95W</td> </tr> <tr> <td>1</td> <td>Optional</td> <td>4.0W</td> <td>0.44 to 3.84W</td> </tr> <tr> <td>2</td> <td>Optional</td> <td>7.0W</td> <td>3.84 to 6.49W</td> </tr> <tr> <td>3</td> <td>Optional</td> <td>15.4W</td> <td>6.49 to 12.95W</td> </tr> <tr> <td>4</td> <td>Optional</td> <td>30W</td> <td>12.95W to 25.5W</td> </tr> </tbody> </table> <p>Follow the standard PSE pin-out standard of Alternative A (MAD-X) which is sending out power over number</p> | Class                                  | Usage                                      | Minimum Power Levels Output at the PSE | Maximum Power Levels at the Powered Device | 0 | Default | 15.4W | 0.44 to 12.95W | 1 | Optional | 4.0W | 0.44 to 3.84W | 2 | Optional | 7.0W | 3.84 to 6.49W | 3 | Optional | 15.4W | 6.49 to 12.95W | 4 | Optional | 30W | 12.95W to 25.5W |
| Class                            | Usage   | Minimum Power Levels Output at the PSE | Maximum Power Levels at the Powered Device |  |  |   |         |       |                |   |          |      |               |   |          |      |               |   |          |       |                |   |          |     |                 |
| 0                                | Default   | 15.4W                                  | 0.44 to 12.95W                             |  |  |   |         |       |                |   |          |      |               |   |          |      |               |   |          |       |                |   |          |     |                 |
| 1                                | Optional  | 4.0W                                   | 0.44 to 3.84W                              |  |  |   |         |       |                |   |          |      |               |   |          |      |               |   |          |       |                |   |          |     |                 |
| 2                                | Optional  | 7.0W                                   | 3.84 to 6.49W                              |  |  |   |         |       |                |   |          |      |               |   |          |      |               |   |          |       |                |   |          |     |                 |
| 3                                | Optional  | 15.4W                                  | 6.49 to 12.95W                             |  |  |   |         |       |                |   |          |      |               |   |          |      |               |   |          |       |                |   |          |     |                 |
| 4                                | Optional  | 30W                                    | 12.95W to 25.5W                            |  |  |   |         |       |                |   |          |      |               |   |          |      |               |   |          |       |                |   |          |     |                 |



|                     |   |
|---------------------|---|
|                     | 1,2,3,6 pins of 8 wires of Ethernet CAT5 UTP cable                                |
| <b>Reset button</b> | Support reset to default configuration  |
| <b>Dimension</b>    | 441(W) x 330(D) x 45(H) mm  |
| <b>FAN Design</b>   | Fan*4 (Smart Fan)   |
| <b>Temperature</b>  | Operating: 0 ~ 50?<br>Storage : -40 ~ 70?   |
| <b>Humidity</b>     | Operating: 10% ~ 90% RH (non-condensing)<br>Storage: 5% ~ 90% RH (non-condensing) |

### Software Specs:

|                   |                    |                                       |   |  |
|-------------------|--------------------|---------------------------------------|---|--|
| <b>Status</b>     | System Information |                                       |   |  |
|                   | Logging Message    |                                       |   |  |
|                   | Port               | Statistics                            |   |  |
|                   |                    | Error Disabled                        |   |  |
|                   |                    | Bandwidth Utilization                 |   |  |
|                   | Link Aggregation   |                                       |   |  |
| MAC Address Table | 16K                |                                       |   |  |
| <b>Network</b>    | IP Address         | Static / Dynamic                      |   |  |
|                   | System Time        | SNTP / From Computer / Manual Time    |   |  |
| <b>Port</b>       | Port Setting       | State / Speed / Duplex / Flow Control |   |  |
|                   | Error Disabled     | Recovery Interval                     | ACL / ARP Rate Limit / BPDU Guard / Broadcast Flood / DHCP Rate Limit / Port Security / Self Loop / Unicast Flood / Unknown Multicast Flood |  |
|                   | Link Aggregation   | Group                                 |   |  |
|                   |                    | Port Setting                          | State / Speed / Flow Control  |  |
|                   |                    | LACP                                  |   |  |
|                   | EEE                |                                       |   |  |
| Jumbo Frame       | 12K Byte           |                                       |   |  |
| <b>PoE</b>        | Global Setting     | Schedule Status                       |   |  |
|                   | Priority Setting   |                                       |   |  |
|                   | Power Limit        |                                       |   |  |

|                          |                   |  |   |
|--------------------------|-------------------|--|---|
|                          | Power Show        |  |   |
| <b>VLAN</b>              | VLAN              | Create VLAN  |   |
|                          |                   | VLAN Configuration                                 |   |
|                          |                   | Membership   |   |
|                          |                   | Port Setting                                       |   |
|                          | Voice VLAN        | Property   |   |
|                          |                   | Voice OUI  |   |
|                          | Protocol VLAN     | Protocol Group                                     |   |
|                          |                   | Group Binding                                      |   |
|                          | MAC VLAN          | MAC Group  |   |
|                          |                   | Group Binding                                      |   |
|                          | Surveillance VLAN | Property   |   |
|                          |                   | Surveillance OUI                                   |   |
|                          | GVRP              | Property   |   |
|                          |                   | Membership   |   |
| Statistics               |                   |  |   |
| <b>MAC Address Table</b> | Dynamic Address   | Aging Time   |   |
|                          | Static Address    |  |   |
|                          | Filtering Address |  |   |
| <b>Spanning Tree</b>     | Property          | State / Operation Mode / Path Cost / BPDU Handling | Operation Mode : STP/RSTP/MSTP                      |
|                          | Port Setting      |  |   |
|                          | MST Instance      |  |   |
|                          | MST Port Setting  |  |   |
|                          | Statistics        |  |   |
| <b>Discovery</b>         | LLDP              | Property   |   |
|                          |                   | Port Setting                                       |   |
|                          |                   | MED Network Policy                                 |   |
|                          |                   | MED Port Setting                                   |   |
|                          |                   | Packet View  |   |
|                          |                   | Local Information                                  |   |
|                          |                   | Neighbor   |   |
|                          |                   | Statistics   |   |
| <b>Multicast</b>         | General           | Property   | Unknown Multicast Action / Multicast Forward Method |
|                          |                   |  |   |





|                 |                        |  |  |
|-----------------|------------------------|--|--|
|                 |                        | Group Address  |  |
|                 |                        | Router Port  |  |
|                 |                        | Forward All Table  |  |
|                 |                        | Throttling   |  |
|                 |                        | Filtering Profile  |  |
|                 |                        | Filtering Binding  |  |
|                 | IGMP Snooping          | Property   | State / Version / Report Suppression                         |
|                 |                        | Querier  |  |
|                 |                        | Statistics   |  |
|                 | MLD Snooping           | Property   | State / Version / Report Suppression                         |
|                 |                        | Statistics   |  |
|                 | MVR                    | Property   | State / VLAN / Mode / Group Start / Group Count / Query Time |
|                 |                        | Port Setting   |  |
| Group Address   |                        |  |  |
| <b>Security</b> | RADIUS                 |  |  |
|                 | TACACS+                |  |  |
|                 | AAA                    | Method List  |  |
|                 |                        | Login Authentication   | Console / Telnet / SSH / HTTP / HTTPS                        |
|                 | Management Access      | Management VLAN  |  |
|                 |                        | Management Service   | Telnet / SSH / HTTP / HTTPS / SNMP / Session Timeout         |
|                 |                        | Management ACL   |  |
|                 |                        | Management ACE   |  |
|                 | Authentication Manager | Property   |  |
|                 |                        | Port Setting   |  |
|                 |                        | Sessions   |  |
|                 | Port Security          |  |  |
|                 | Protected Port         |  |  |
| Storm Control   |                        | State / Broadcast / Unknown Multicast / Unknown Unicast / Action (Drop / Shutdown) |  |



|                    |                        |                       |                                       |
|--------------------|------------------------|-----------------------|---------------------------------------|
|                    | DoS                    | Property              |                                       |
|                    |                        | Port Setting          |                                       |
|                    | Dynamic ARP Inspection | Property              |                                       |
|                    |                        | Statistics            |                                       |
|                    | DHCP Snooping          | Property              |                                       |
|                    |                        | Statistics            |                                       |
|                    |                        | Option82 Property     |                                       |
|                    |                        | Option82 Circuit ID   |                                       |
|                    | IP Source Guard        | Port Setting          |                                       |
|                    |                        | IMPV Binding          |                                       |
| Save Database      |                        |                       |                                       |
| <b>ACL</b>         | MAC ACL                |                       |                                       |
|                    | MAC ACE                |                       |                                       |
|                    | IPv4 ACL               |                       |                                       |
|                    | IPv4 ACE               |                       |                                       |
|                    | IPv6 ACL               |                       |                                       |
|                    | IPv6 ACE               |                       |                                       |
|                    | ACL Binding            |                       |                                       |
| <b>QoS</b>         | General                | Property              | CoS / DSCP / CoS-DSCP / IP Precedence |
|                    |                        | Queue Scheduling      | Strict Priority / WRR                 |
|                    |                        | CoS Mapping           |                                       |
|                    |                        | DSCP Mapping          |                                       |
|                    |                        | IP Precedence Mapping |                                       |
|                    | Rate Limit             | Ingress / Egress Port |                                       |
| Egress Queue       |                        |                       |                                       |
| <b>Diagnostics</b> | Logging                | Property              | Console / RAM / Flash                 |
|                    |                        | Remote Server         |                                       |
|                    | Mirroring              |                       |                                       |
|                    | Ping                   |                       |                                       |
|                    | Traceroute             |                       |                                       |
|                    | Copper Test            |                       |                                       |
|                    | Fiber Module           |                       |                                       |
|                    | UDLD                   | Property              | Message Time                          |
| Neighbor           |                        |                       |                                       |
| <b>Management</b>  | User Account           |                       |                                       |

|         |               |                    |   |
|---------|---------------|--------------------|---|
|         | Firmware      | Upgrade / Backup   | Action (Upgrade / Backup) / Method (TFTP / HTTP)                |
|         |               | Active Image       | Active Image / Backup Image                                     |
|         | Configuration | Upgrade / Backup   | Action (Upgrade / Backup) / Method (TFTP / HTTP)                |
|         |               | Save Configuration | Source File / Destination File, Restore Factory Default         |
|         | SNMP          | View               |   |
|         |               | Group              |   |
|         |               | Community          |   |
|         |               | User               |   |
|         |               | Engine ID          |   |
|         |               | Trap Event         | Authentication Failure / Link UP_Down / Cold Start / Warm Start |
|         |               | Notification       |   |
|         | RMON          | Statistics         |   |
| History |               |                    |   |
| Event   |               |                    |   |
| Alarm   |               |                    |   |

## Attributes

| Attribute             | Value                  |
|-----------------------|------------------------|
| Anzahl Ports PoE/LAN: | 48/0                   |
| Belüftung Switch:     | Mit Lüfter             |
| Einsatzort Switch:    | 19"                    |
| LAN Geschwindigkeit:  | 1Gbit/s                |
| Management:           | smart managed (WebGui) |
| PoE Budget:           | <1000 Watt             |
| PoE Port Leistung:    | 30W at                 |
| SFP Geschwindigkeit:  | SFP+ 10Gbit;           |
| Weight:               | 6 Kg                   |
| Warranty:             | 24.00 Months           |

## Accessories

| Part No. | Name  |
|----------|---|
| 101189   | ALLNET ALL4757 / Switch module SFP+ (mini Gbic), 10Gbit, SR/  |
| 101190   | ALLNET ALL4758 / Switch module SFP+ (mini Gbic), 10Gbit, LR/  |
| 128848   | ALLNET Switch Module ALL4760 SFP+(Mini-GBIC), 10Gbit  |
| 132994   | ALLNET Switch Modul, DAC(direkt Kabel), SFP+/SFP+, 10Gbit, 0,5m,  |
| 132996   | ALLNET Switch Modul, DAC(direkt Kabel), SFP+/SFP+, 10Gbit, 1m,  |
| 132997   | ALLNET Switch Modul, DAC(direkt Kabel), SFP+/SFP+, 10Gbit, 3m,  |
| 132998   | ALLNET Switch Modul, DAC(direkt Kabel), SFP+/SFP+, 10Gbit, 5m,  |
| 132999   | ALLNET Switch Modul, DAC(direkt Kabel), SFP+/SFP+, 10Gbit, 7m,  |
| 139776   | ALLNET Switch Module ALL4763 SFP+(Mini-GBIC), 10Gbit  |
| 139777   | ALLNET Switch Module ALL4764 SFP+(Mini-GBIC), 10Gbit  |
| 146282   | ALLNET Switch Module ALL4767 SFP+(Mini-GBIC), 10Gbit  |
| 149613   | ALLNET Switch Module ALL4757-INDU SFP+(Mini-GBIC), 10Gbit   |
| 149616   | ALLNET Switch Module ALL4758-INDU SFP+(Mini-GBIC), 10Gbit   |
| 158461   | ALLNET Switch Modul, DAC(direkt Kabel), SFP+/SFP+, 10Gbit, 2m,  |
| 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                         |
| 208360   | ALLNET Switch Modul ALL4767-INDU SFP+(Mini-GBIC), 10Gbit, RJ45(TP), uncodiert, Industrial -40/+85 Grad, |