S3220 Series
Stand-alone Gigabit Ethernet Remotely Managed NID
10/100/1000Base-T to 1000Base-X with OAM/IP-Based Management

The ION S3220 is a stand-alone managed Network Interface Device (NID) that provides an interface between 10/100/1000Base-TX ports and 1000Base-SX/LX ports, allowing users to manage their links while integrating fiber optic cabling into 10/100/1000 copper environments. As a remotely managed device, the S3220 can be managed individually via an IP address or it can be managed in-band, over the fiber when linked to a C3220 card installed in a managed ION chassis. With advanced features like IEEE 802.3ah Link OAM, VLAN, GoS, SSH/SSL, jumbo frame support, and bandwidth allocation, the S3220 offers a variety of methods for the secure delivery of Ethernet services in business and mobile backhaul applications.

Features
- MEF 9, 14 and 21 certified
- IEEE 802.3ah Link OAM
- 10G Jumbo Frame Support
- Two selectable Remote Management modes:
  - IP-Based Remote Management
  - In-Band (remote device managed by local peer)
- Auto-MDI/MDIX
- Auto-Negotiation
- Pause
- Transparent Link Pass Through
- Far-End-Fault (FEF)
- Remote Loopback
- Field Upgradable Firmware
- IPv4 IP TOS, DiffServ and IPv6 traffic class QoS classification
- IEEE 802.10 VLAN and double VLAN tagging with 4096 VIDs
- DHCP client
- SNTP
- TFTP
- RADIUS client
- RMON counters for each port
- Bandwidth profiling
- DMI Optical Management
- Cable diagnostic function for copper ports
- SSH
- Telnet
- Command Line Interface (CLI)
- Web management
- Focal Point Management
- SNMP v1, v2c, and v3
- USB port for basic setup
- Management VLAN

Specifications

| Standards          | IEEE 802.3  
|--------------------|------------
|                    | IEEE 802.3ah
|                    | IEEE 802.1p
|                    | IEEE 802.1Q
| Data Rate          | Copper: 10/100/1000 Mbps 
|                    | Fiber: 1000 Mbps
| Filtering Address  | 8K MAC Addresses
| Max Frame Size     | 10,240 bytes
| Dimensions         | Width: 3.25” [82 mm] 
|                    | Depth: 6.5” [165 mm] 
|                    | Height: 1” [25 mm]
| Power Input        | 100-240 VAC, 1A
| Power Output       | 12 VDC, 1.25A
| Environment        | Operating: 0°C to +50°C 
|                    | Storage: -25°C to +65°C 
|                    | Humidity: 5% to 95% (non-condensing) 
|                    | Altitude: 0 to 10,000 ft. 
|                    | S3221-1040-T 
|                    | Operating: -40°C to +65°C 
|                    | Storage: -40°C to +85°C
| Weight             | 2 lbs. [0.90 kg]
| Certifications     | EN55022 Class A, EN55024, UL60950, CE Mark
| Warranty           | Lifetime

Ordering Information

<table>
<thead>
<tr>
<th>SKU</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S3220-1013</td>
<td>10/100/1000Base-T (RJ-45) [100 m] to 1000Base-SX 850nm multimode (SC) [62.5/125 µm fiber: 220 m/722 ft.] [50/125 µm fiber: 550 m/1804 ft.] Link Budget: 8.5 dB</td>
</tr>
<tr>
<td>S3220-1014</td>
<td>10/100/1000Base-T (RJ-45) [100 m] to 1000Base-LX 1310nm single mode (SC) [10 km/6.2 mi.] Link Budget: 10.5 dB</td>
</tr>
<tr>
<td>*S3220-1040</td>
<td>10/100/1000Base-T (RJ-45) [100 m] to (1) 100/1000Base-X Open SFP Slot</td>
</tr>
<tr>
<td>*S3221-1040</td>
<td>10/100/1000Base-T (RJ-45) [100 m] to (2) 100/1000Base-X Open SFP Slots</td>
</tr>
<tr>
<td>*S3221-1040-T</td>
<td>10/100/1000Base-T (RJ-45) [100 m] to (2) 100/1000Base-X Open SFP Slots, Extended Operating Temp Range</td>
</tr>
</tbody>
</table>

Optional Accessories (sold separately)

<table>
<thead>
<tr>
<th>SFP Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting Options</td>
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<tr>
<td>WMBL</td>
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<tr>
<td>WMBD</td>
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<tr>
<td>RMS19-SAA-02</td>
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</tbody>
</table>

Power Supply Included

To order the corresponding country specific power supply, add the extension from the list below to the end of the SKU; Ex: S3220-1013-NA

-NA = Country Code
-NA = North America
-LA = Latin America
-EU = Europe
-UK = United Kingdom
-SA = South Africa
-JP = Japan
-DZ = Australia
-BR = Brazil

Note: all units feature USB port for local management application.

*S3220-1040, S3221-1040, and S3221-1040-T have SGMII support for use with 10/100/1000Base-T copper SFPs.

*S3221-1040-T must use extended temperature SFP modules in order to meet the -40°C to +65°C operating temperature range.

Media Converters

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