# Overview

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# Features

The Cisco® Provider Connectivity Assurance Sensor LX-S (formerly Accedian Skylight LX-S Performance Element) is a compact, 1 and 10 Gigabit Ethernet (1/10GE) platform with ultra-low-latency packet forwarding and jitter. Designed for high-availability applications requiring MEF-type service assurance, the Assurance Sensor LX-S is optimized for scalable service delivery and performance monitoring. Its design is ideal for deployment in space-constrained environments for mobile backhaul and business Ethernet applications.

The LX-S provides all the tools to establish, validate, and monitor Layer 2 and Layer 3 services in a single, small footprint. It is a flexible, scalable alternative to switches and routers when delivering resilient services over optical linear or ring topologies. Zero-touch provisioning and IPv4/IPv6 management support make the LX-S easy to deploy, manage, and secure.

Fully integrated with the Cisco Provider Connectivity Assurance platform, the LX-S supports service delivery automation, scalable metrics collection, and reporting—along with actionable insights delivery and machine learning for accelerated service roll-out and improved operational efficiencies.

*Figure 1: Assurance Sensor LX-S*



The following table lists the features of the Assurance Sensor LX-S.

*Table 1: Assurance Sensor LX-S Features*

| Feature | Description |
|---|---|
| Form factor | 1RU |
| Rack mount | Standard 19-inch (48.3 cm) or 23-inch (58.42 cm) rack |
| Airflow | Front to rear |
| Management ports | Built-in<br><br>One RJ-45 connector (10M/100M/1GbE) |
| Traffic ports | Four SFP+ connectors (1G/10GbE) |
| Console port | One RJ-45 connector (RS-232) |
| Dry contact inputs | One RJ-45 connector (four dry contacts) |
| Fans | Two fans for front-to-rear cooling |

The following table lists the regulation and standard compliance features of the Assurance Sensor LX-S.

*Table 2: Regulation and Standard Compliance (Model: NODE2c)*

| Feature | Description |
|---|---|
| Safety | IEC 62368-1, EN IEC 62368-1, AS/NZS 62368.1, CSA/UL 62368-1, GB 4943.1, J62368-1, SASO-IEC 62368-1 |
| EMC - Emission (Class A) | CISPR 32, EN 55032, FCC 47 CFR Part 15 Subpart B, ICES-003, AS/NZS CISPR 32, VCCI-CISPR 32, KN32 |

| Feature | Description |
|---|---|
| EMC - Immunity | EN 55035, KN35 |
| Telco | NEBS Level-3: GR-63, GR-1089 |
| Enviro | RoHS: IEC 63000, EN IEC 63000 |

# Package Contents

Package contents for the Assurance Sensor LX-S include the following:

- Assurance Sensor LX-S (1)

- Rubber feet (4)

- *Cisco Provider Connectivity Assurance Sensor LX-S*

  This document contains URLs that point to the hardware installation guide, regulatory compliance and safety information guide, warranty, and licensing pages, and a QR code that points to the management center Documentation Portal.

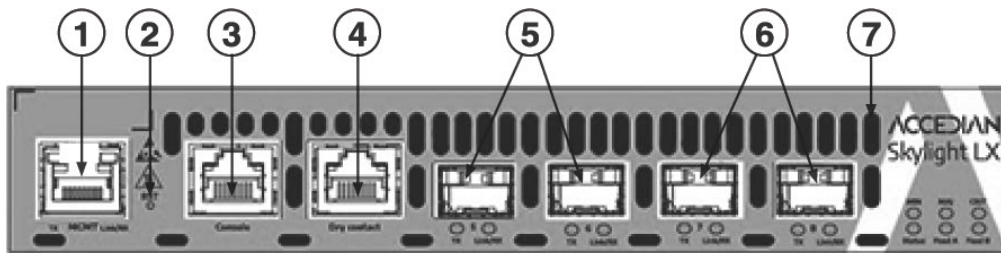**Note** The package can contain other ordering options.

# Serial Number Locations

The Serial Number (SN) and the Media Access Control (MAC) address are located at the bottom of the Assurance Sensor LX-S.

# Front Panel

The following figure shows the front panel features of the Assurance Sensor LX-S. See for a description of the LEDs.

**Figure 2: Font Panel**
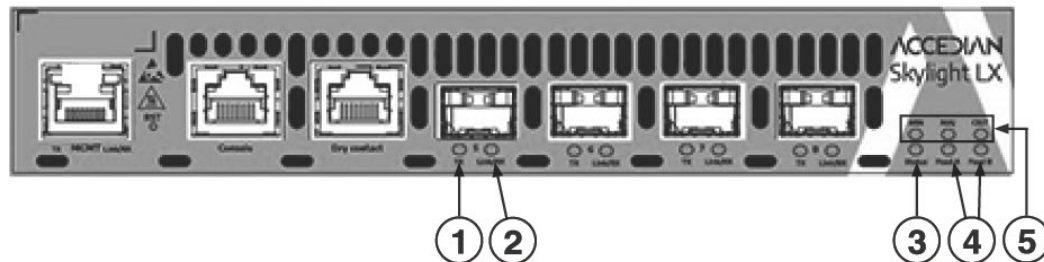


| 1 | Management port | 2 | RST |
|---|---|---|---|
| | One RJ-45 connector (10M/100M/1GbE) | | System reset button |
| | | | **Note** Press the RST button for more than five seconds to reset the unit to factory defaults. |
| 3 | Console port | 4 | Dry contact inputs |
| | One RJ-45 connector (RS-232) | | One RJ-45 connector (four dry contacts) |
| | | | **Caution** The Dry Contacts Interface is strictly Safety Extra Low Voltage (SELV). |
| | | | • Pin #1—Ground 1 |
| | | | • Pin #2—Dry contact 1 |
| | | | • Pin #3—Ground 3 |
| | | | • Pin #4—Dry contact 2 |
| | | | • Pin #5—Ground 2 |
| | | | • Pin #6—Dry contact 3 |
| | | | • Pin #7—Ground 4 |
| | | | • Pin #8—Dry contact 4 |
| 5 | Traffic ports 5-6 | 6 | Traffic ports 7-8 |
| | Two SFP+ connectors (1G/10GbE) | | Two SFP+ connectors (1G/10GbE) |
| 7 | System ventilation holes | | — |
| | Fresh air intake | | |

# Front Panel LEDs

The following figure shows the front panel LEDs and describes their states.
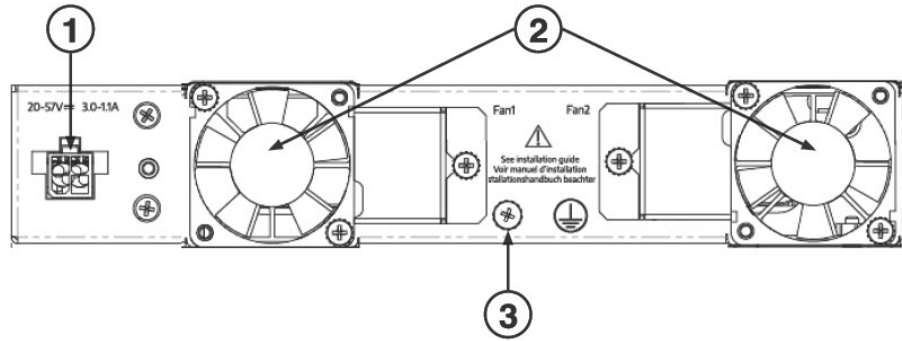
**Figure 3: Front Panel LEDs and Their States**



| 1 | TX LED | 2 | Link/RX LED |
|---|--------|---|-------------|
| | • Off—The port is not transmitting data.<br><br>• Green, flashing—The port is transmitting data. | | • Off—The link is inactive.<br><br>• Green—The link is active.<br><br>• Green, flashing—The port is receiving data. |
| **3** | STATUS LED | **4** | PWR LED (feed A/B) |
| | • Green—Normal operation.<br><br>• Green, flashing—The unit is booting up. | | • Off—The device is unpowered.<br><br>• Green—The device is powered. |
| **5** | MIN MAJ CRIT LEDs<br><br>• MIN<br><br>  Yellow—A minor alarm condition is present.<br><br>• MAJ<br><br>  Red—A major alarm condition is present.<br><br>• CRIT<br><br>  Red—A critical alarm condition is present. | | — |

# Rear Panel

The following figure shows the rear panel of the Assurance Sensor LX-S.

*Figure 4: Rear Panel*



| 1 | DC power input | 2 | Hot-swappable fans |
|---|---|---|---|
| | 1x DC connector: Molex, 43810-0001 | | Hot air outtake |
| 3 | Ground lug | | — |
| | Protective ground point (lug type: 1x screw #6) | | |

# Power Supply

The following table lists the specifications for each power supply used in the Assurance Sensor LX-S.

*Table 3: Power Specifications*

| Description | Specification |
|---|---|
| Input power ratings | 20 to 57 V DC, 3.0 to 1.1 $A_{Max}$ |
| Output power ratings | SFP+: 2.5 $W_{Max}$ per port |
| | SFP: 2.0 $W_{Max}$ per port |
| Power consumption | $40W_{Nom}$, $55W_{Max}$ (136 BTU/$hr_{Nom}$, 188 BTU/$hr_{Max}$) |

# Hardware Specifications

The following table contains hardware specifications for the Assurance Sensor LX-S.

| Dimensions (H x W x D) | 7.9 x 1.5 x 10.4 inches (20.1 x 3.8 x 26.4 cm) |
|---|---|
| Weight | 3.7 lb (1.7 kg) |

| Temperature | Operating: |
|---|---|
| | • Commercial: 32° to 122°F (0° to 50°C) |
| | • Hardened: -40° to 149°F (-40° to 65°C) |
| | Storage: -40° to 158°F (-40° to 70°C) |
| Humidity | Operating: 5 to 85% RH, noncondensing |
| | Storage: 5 to 95% RH, noncondensing |
| Altitude | Maximum: 6600 ft (2000 m), above sea level |

# Product ID Numbers

The following table lists the field-replaceable PIDs associated with the Assurance Sensor LX-S. If any internal components fail, you must get a return material authorization (RMA). See the Cisco Returns Portal for more information.

**Table 4: Assurance Sensor LX-S PIDs**

| PID | Description |
|---|---|
| SKY-LXS-H-DD | 4xSFP+ - Dual DC Power Supply - Hardened |
| SKY-LXS-Y-DD | 4xSFP+ - SyncE - Dual DC Power Supply |
| SKY-LXS-DD | 4xSFP+ - Dual DC Power Supply |
| SKY-LXS-HY-DD | 4xSFP+ - SyncE - Dual DC Power Supply - Hardened |