Installation guide

SL1 Service Link Module

SL1-JP (920 MHz) · SL1-EU (868 MHz) · SL1-NA (915 MHz) · SL1-AX antenna extension kits

1. Overview

The SL1 is a field-removable module for the rear option bay of HS-2200 and HS-1100 series chassis. It gives the H-BMC management controller a radio link to a Hosaka gateway for status reports and alerts at sites without a management network, such as roadside cabinets, substations and telecommunications huts.

While a service session is open, the module transmits a short beacon carrying the service profile name configured in the H-BMC, so that a field engineer with a handheld receiver can find the unit. The same name is shown on the module's status display. From H-BMC 2.31, the beacon and display also carry the unit's asset name if one is set.

> **Caution.** The SL1 is not recommended for installation in data centres. Status reports and beacons can be received outside the building, particularly when the antenna is mounted on an extension, and may disclose the presence and name of the unit.

2. Contents

SL1 module	Module with radio, status display and rear antenna connector. Serial number on the label (for example S1N-26-0001).
Antenna	Whip antenna for direct mounting.
SL1-AX10 / SL1-AX30 (option)	Low-loss cable, 10 m or 30 m, with mast bracket and weatherproof connector boot.

3. Installation

- The module is hot-pluggable. Remove the blanking plate from the rear option bay and slide the module in until the latch clicks. The H-BMC records `SL1 INSERTED` in its event log.
- Attach the antenna directly, or through an SL1-AX kit where the unit is in a metal cabinet. Route the cable away from power cables.
- In the H-BMC, set the region, the gateway key and the service profile name (Network > Service Link). The profile name is up to 16 characters.
- To move a module to another unit, remove it (`SL1 REMOVED` is logged), fit it to the other unit and repeat the configuration if the units use different gateways.

4. Beacon and display

H-BMC version	Beacon content during a service session	Status display
`2.10 to 2.24`	Service profile name	Service profile name
`2.31 and later`	Service profile name, then asset name if set (can be turned off)	Asset name if set, otherwise service profile name

The beacon is transmitted once every 10 seconds from the start to the end of a service session. Use `sl1 beacon off` to stop it.

5. Radio specifications

Frequency	SL1-JP 920 MHz band; SL1-EU 868 MHz band; SL1-NA 902 to 928 MHz
Modulation	Chirp spread spectrum
Transmit power	Up to 25 mW (SL1-EU), up to 100 mW (SL1-NA, SL1-JP within national limits)
Typical range	2 to 5 km in built-up areas with the antenna outdoors; less indoors
Certification	Certified for use in Japan, the European Union, the United Kingdom, the United States and Canada. Certification numbers are on the module label.

Use only the regional version certified for the country of installation.