



wLSN Installation Tool



The wLSN Installation Tool is an alphanumeric liquid crystal display (LCD) keypad that works with the wLSN Hub to assist the installer in evaluating the suitability of a particular site for the installation of wireless devices and for verifying the acceptability of specific locations for the placement of wireless devices. The installation tool has a two-line, 16-character text display and a sounder. The installation tool also has a green LED for indicating battery charging status. The installation tool comes with a plug-in transformer and two docking stations: one for wall mounting; the other is a desktop cradle.

Functions

Diagnostic Modes

Use the wLSN Installation Tool as a pre-installation tool for determining the suitability of a particular site for wireless applications or to validate individual device RF performance prior to permanent mounting. In other words, the wLSN Installation Tool provides assurance that a device installed at the chosen location can communicate reliably with the wLSN Hub.

The wLSN Installation Tool has three user-selectable modes:

- ▶ **Powered by rechargeable batteries**
- ▶ **Docking stations provide power source (6 VDC to 14 VDC) for battery recharging**
- ▶ **Externally-visible LED indicates charging status**
- ▶ **Battery saving mode**
- ▶ **Displays low-battery status**
- ▶ **Ensures reliable RF communications at chosen device locations prior to permanently mounting a device**

1. **Go/No Go:** indicates whether or not the tool is receiving a signal from the wLSN Hub of sufficient strength to ensure reception by a wireless device located at that site
2. **Packet Success Rate:** indicates signal strength by the number of bars shown and the number of packets received by the tool (three packets are sent from the wLSN Hub every four seconds). The best location for placing a device is the one showing the highest number of bars and packets received.
3. **Signal-to-Noise Ratio:** provides separate readings for received signal strength, ambient noise level, and signal-to-noise ratio. The higher the signal-to-noise-ratio; the better the location.

Fixed Operation

When placed into a docking station, the wLSN Installation Tool is powered from the docking station through a cable and wall transformer. While the tool is in the docking station, the batteries are automatically recharged. The green status LED on the tool indicates the charging status of the batteries whenever the tool is in the docking station:

- Continuously on indicates fully-charged batteries
- Slow flashing indicates batteries are being recharged
- Off indicates the installation tool is not connected to the recharging circuit

Mobile Operation

When removed from the docking station, the tool automatically switches to mobile operating mode wherein

it is powered by its batteries and goes into a sleep mode after a preset duration of inactivity. The tool automatically wakes up from sleep mode whenever a button is pressed.

Certifications and Approvals

Listings and Approvals: **CE**
Complies with: EN50131-1 Grade 2, Environmental class II

Installation/Configuration Notes

Compatibility Information

The wLSN Installation Tool requires the wLSN Hub to operate and provide installation information.

Mounting Considerations

The required region-specific transformers have 1.8 m (6 ft) cords. Position the docking units near a wall outlet in order to plug in the transformer.

Note Refer to the *wLSN Installation Tool Installation Instructions* (P/N: F01U008748) for instructions on connecting the transformers to the docking stations.

Mount the wall-mount docking station to an interior wall and/or place the desktop docking station on a flat surface. The docking stations must be protected from weather elements such as rain or snow and from accidental exposure to spills or leaks.

Parts Included

Quant.	Component
1	Installation tool
1	Transformer (region specific) ¹
2	Docking stations (wall and desktop)
3	AAA (NiMH) batteries (P/N: 16556)
1	Hardware pack
1	Literature pack

¹Each installation tool is supplied with a region-specific transformer designed to be wired to either of the docking

stations and to plug into the local electrical outlet. Refer to the following for transformer illustrations:



European transformer (A) supplied with ISW-BIT1-HAX



United Kingdom transformer (B) supplied with ISW-BIT1-HBX



United States transformer (C) supplied with ISW-BIT1-HCX

Technical Specifications

Environmental Considerations

Environment:	Indoor, dry
EN50131-1:	Environmental Class II
Relative Humidity:	Up to 95%, non-condensing
Temperature (operating):	-10°C to +55°C (+14°F to +131°F)

Mechanical Properties

Color:	Off-white
Dimensions (H x W x D):	12.6 cm x 7.5 cm x 4.5 cm (5.0 in. x 3.0 in. x 1.8 in.)

Power Requirements

Battery Power

Battery Life:	Up to 50 hr of continuous use on a single charge.
Battery Requirements:	Three AAA nickel-metal hydride (NiMH) re-chargeable batteries
Recommended Replacements:	SANYO® HR-AAAU
Recharge Time:	Requires 7 hr to recharge fully depleted batteries

External Power Supply (Docking Module)

Voltage (supply):	6 VDC to 14 VDC
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Reception Characteristics

Frequency:	European Security Band 868 MHz to 869 MHz
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Transformers

All Transformer Models

Current (output):	0.33 A
Power:	8 W
Voltage (output):	with load: 9.0 VDC ± 5%

ISW-BIT1-HAX (United Kingdom Transformer)

Frequency:	50 Hz
Voltage (input):	230 VAC to 240 VAC
Voltage (output):	without load: 15.0 VDC ± 5%

ISW-BIT1-HBX (European Transformer)

Frequency:	50 Hz
Voltage (input):	230 VAC to 240 VAC
Voltage (output):	without load: 16.5 VDC ± 5%

ISW-BIT1-HCX (United States Transformer)

Frequency:	60 Hz
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ISW-BIT1-HCX (United States Transformer)

Voltage (input):	120 VAC
Voltage (output):	without load: 13.5 VDC ± 5%

Trademarks

SANYO® is a registered trademark of SANYO North America Corporation.

Ordering Information

wLSN Installation Tool (EU)	ISW-BIT1-HAX
wLSN Installation Tool (UK)	ISW-BIT1-HBX
wLSN Installation Tool (US)	ISW-BIT1-HCX

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