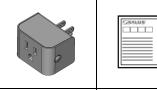
# Installation/User Guide: miniSmartPlug (SX885ZB DG MN)

# IN THE BOX



Installation/User Guide

#### Note:

Additional equipment may be required due to construction or materials, or other radio interference that may reduce the radio range.

#### SAFETY INSTRUCTION

Read these instructions carefully **before installing and using** the miniSmartPlug and keep this guide in a safe place for future reference.

- **Verify compatibility** with your associated connected home system before installation.
- Follow all instructions provided by your connected home manufacturer regarding the addition of devices to your connected home system. An authorized, qualified installer may be required.

Salus accepts no responsibility for damage caused by not following these instructions.

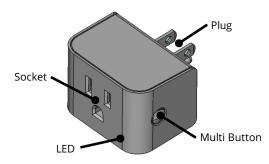
# **PRODUCT INTRODUCTION**

miniSmartPlug

The Salus miniSmartPlug switch is a ZigBee compatible, connected AC switch that provides ON/OFF control of the attached AC appliance and measures the power/energy consumption of the appliance. Key features include:

- Quick and easy installation
- Support for OpenHome and ZigBee™ HA connected home systems
- Support for loads up to 15Amps (resistive).
- Appliance load sensing to turn ON.

## **CONTROLS AND INDICATORS**



Item	Description
Plug	NEMA 5-15 (Type B) plug. Compatible with US and Canadian standard 120VAC/15A electrical outlets
Socket	NEMA 5-15 grounded (Type B) outlet. Compatible with US/Canadian standard 120VAC/15A electrical plugs
Multi Button	Multi-function user input button: Pair, Rejoin, Factory Defaults, and On/Off
LED	White LED status indicator

# **PAIRING INSTRUCTIONS**

- Prepare to add devices per your system's instructions.
- Plug the miniSmartPlug switch into the desired AC outlet to account for any radio interference
- When the switch is detected, follow your system's instructions to finish adding the switch to the system. You may need to press the Multi Button to identify the switch.

### USING THE SWITCH

Note: Immediately after being plugged in, there is a slight delay before the miniSmartPlug switch starts measuring energy and responding to the button or remote commands.

#### TURN OFF/ON

• To toggle the miniSmartPlug switch (turn ON when OFF, or turn OFF when ON), press the Multi Button.

#### RESET TO FACTORY DEFAULTS

• To reset the switch to factory default settings, press the Multi Button while plugging in the switch and release the button when the LED comes on.

### FORCE REJOIN TO CURRENT NETWORK

• To find a better path to the connected home system if the network is intermittent and/or other ZigBee devices are added/deleted, press the Multi Button 5 times quickly (less than ½ sec between presses).

#### LOAD SENSING OF APPLIANCE ON/OFF SWITCH

- When the miniSmartPlug switch is OFF, the on/off switch of certain appliances can be used to turn ON the miniSmartPlug switch. *Note:* Turning OFF the miniSmartPlug switch using the appliance switch is not supported.
- To turn ON the miniSmartPlug switch, start with the appliance switch in the on position. Turn the appliance switch off for about ½ sec, then back on. The miniSmartPlug switch will turn ON when it detects the brief off period. **Note:** Certain appliances, such as some CCFL lamps and

electronic equipment using wall transformers, cannot be

monitored as their electrical characteristics do not change enough when the appliance on/off switch is changed.

#### LED INDICATIONS

ON for 2 - 4 sec., then OFF	Switch power up, Switch is OFF
3 flashes	Searching for network to join
Steady ON	Switch is ON
Steady OFF	Switch is OFF
ON, flash OFF every 2 sec	Switch is ON, no network
OFF, flash ON every 2 sec	Switch is OFF, no network

#### **TROUBLESHOOTING**

WILL NOT PAIR INITIALLY

- Radio interference is present at the desired location.
  - 1) Relocate the ZigBee receiver,
  - 2) Select a different location for the switch, or
  - 3) Add a ZigBee repeater to the system.

#### LOSS OF CONNECTION AFTER PAIRING

- Make sure ZigBee receiver is operating
- Radio environment may have changed:
  - 1) Force rejoin to possibly find a better radio path or 2) Apply radio interference solutions above.
- APPLIANCE DOESN'T TURN ON WHEN LED ON THE SWITCH IS ON

- Make sure the attached appliance is turned ON. • Make sure the appliance can be controlled via the AC
- supply. Appliances with "soft" on/off buttons cannot be turned on by turning the AC supply ON.

SWITCH DOESN'T TURN ON WHEN APPLIANCE SWITCH IS TURNED OFF THEN BACK ON

- Make sure the appliance is working by plugging the appliance into an outlet and using the on/off switch.
- Make sure the appliance on/off switch starts in **on** state.
- Make sure the appliance on/off switch can be monitored, e.g., switch is not behind a transformer or a "soft" switch, CCFL can be monitored, etc.

#### **SPECIFICATIONS**

Operating Conditions 32 - 104°F / 0 - 40°C 10 - 90% humidity (non-condensing)  Storage -4 - 185°F / -20 - 85°C  Protocols ZigBee HA 1.2 + basic Meter Supported  RF Freq. 2.4 GHz  Input 120VAC +/-10%, 60 Hz  Max. Switch Current  Size Including Plug: 2.13" x 1.46" x 2.32" / 54mm x 37mm x 59mm  Not including plug: 2.13" x 1.46" x 1.49" / 54mm x 37mm x 38mm	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
(non-condensing)  Storage -4 - 185 °F / -20 - 85 °C  Protocols ZigBee HA 1.2 + basic Meter  Supported  RF Freq. 2.4 GHz  Input 120VAC +/-10%, 60 Hz  Max. Switch Current  Size Including Plug: 2.13" x 1.46" x 2.32" / 54mm x 37mm x 59mm  Not including plug: 2.13" x 1.46" x 1.49" /	Operating	32 - 104°F / 0 - 40°C
Storage -4 - 185 °F / -20 - 85 °C  Protocols Supported  RF Freq. 2.4 GHz Input 120VAC +/-10%, 60 Hz  Max. Switch Current  Size Including Plug: 2.13" x 1.46" x 2.32" / 54mm x 37mm x 59mm Not including plug: 2.13" x 1.46" x 1.49" /	Conditions	10 - 90% humidity
Protocols Supported  RF Freq. 2.4 GHz Input 120VAC +/-10%, 60 Hz  Max. Switch Current  Size Including Plug: 2.13" x 1.46" x 2.32" / 54mm x 37mm x 59mm Not including plug: 2.13" x 1.46" x 1.49" /		(non-condensing)
Supported RF Freq. 2.4 GHz Input 120VAC +/-10%, 60 Hz Max. Switch Current Size Including Plug: 2.13" x 1.46" x 2.32" / 54mm x 37mm x 59mm Not including plug: 2.13" x 1.46" x 1.49" /	Storage	-4 – 185 °F / -20 – 85°C
RF Freq. 2.4 GHz Input 120VAC +/-10%, 60 Hz  Max. Switch Current Size Including Plug: 2.13" x 1.46" x 2.32" / 54mm x 37mm x 59mm Not including plug: 2.13" x 1.46" x 1.49" /	Protocols	ZigBee HA 1.2 + basic Meter
Input 120VAC +/-10%, 60 Hz  Max. Switch Current 15 Amp resistive  Size Including Plug: 2.13" x 1.46" x 2.32" / 54mm x 37mm x 59mm Not including plug: 2.13" x 1.46" x 1.49" /	Supported	
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Current  Size  Including Plug: 2.13" x 1.46" x 2.32" / 54mm x 37mm x 59mm Not including plug: 2.13" x 1.46" x 1.49" /	Input	120VAC +/-10%, 60 Hz
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2.13" x 1.46" x 1.49" /		54mm x 37mm x 59mm
		Not including plug:
54mm x 37mm x 38mm		2.13" x 1.46" x 1.49" /
		54mm x 37mm x 38mm

# **FCC STATEMENTS**

**WARNING:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### **FCC AND INDUSTRY CANADA**

**RF Radiation Exposure statement**: This equipment complies with FCC and Industry Canada RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the antenna and all persons.

# **INDUSTRY CANADA**

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### SALUS WARRANTY

SALUS North America, Inc. ("Salus") warrants that for a period of two (2) years ("Warranty Period") from the date of purchase by the consumer ("Customer"), this device, excluding batteries ("Product"), shall be free of defects in materials and workmanship under normal use and service in accordance with all supplied instructions. During the warranty period, Salus shall, at its option, repair or replace any defective Products, at no charge for the device. Any replacement and/or repaired devices are warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer.

This warranty does not cover removal or reinstallation costs. This warranty does not apply to any Product (i) which has been modified, repaired, or altered, except by Salus or an authorized Salus representative, (ii) which has not been maintained in accordance with any handling or operating instructions supplied by Salus, or (iii) which has been subjected to unusual physical or electrical stress, misuses, abuse, negligence or accidents.

This warranty is the only express warranty Salus makes for the Product. Any implied warranties, including warranties of merchantability or fitness for a particular purpose, are limited to the Warranty Period or the shortest period allowed by law.

SALUS SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, or limitation on the duration of implied warranties of merchantability or fitness, so these exclusions or limitations may not apply to you.

No oral or written information or advice given by Salus or a Salusauthorized representative shall modify or extend this warranty. If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired.

Customer's sole and exclusive remedy under this limited warranty is product repair or replacement as provided herein. If a Product under warranty is defective, the Customer may:

- contact the party ("Seller") from which the Customer purchased the Product to obtain an equivalent replacement product after the Seller has determined that the Product is defective and the Customer is eligible for a replacement, or
- contact Salus Service at support@salusinc.com, to determine whether
  the device qualifies for a replacement. If a replacement is warranted
  and is shipped prior to the return of the device under warranty, a
  credit card is required and a hold may be placed on the Customer's
  credit card for the value of the replacement until the returned
  device is verified as eligible for replacement, in which case, the
  Customer's credit card will not be charged.

This warranty gives you specific legal rights, and you may also have other rights that vary from jurisdiction to jurisdiction. If you have any questions regarding this warranty, please write Salus at:

SALUS North America, Inc. 850 Main Street Redwood City, CA 94063