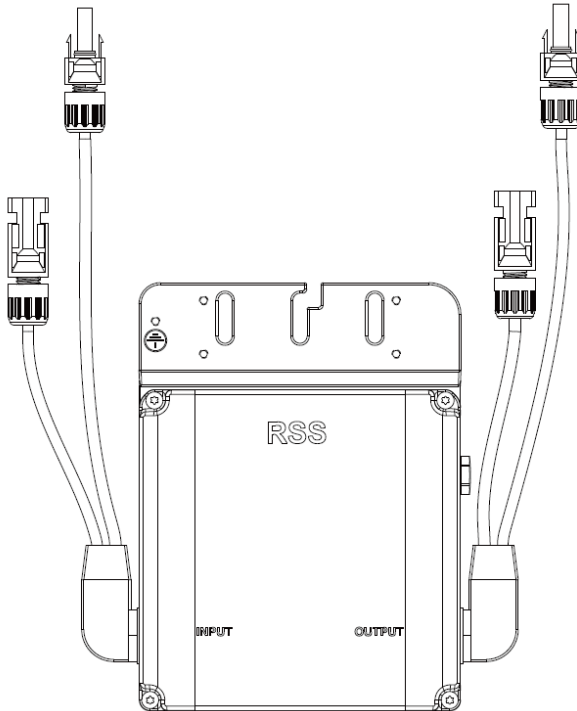




SMART RSS Quick Install Guide



Revision 00

©2015, Delta Electronics

To prevent the risk of electrical shock, and to ensure long-term operation, please download the installation manual from the website at <http://www.delta-americas.com/Products/RenewableEnergy>
Please read carefully and follow all safety precautions at all times.

Installing the SMART RSS

SMART RSS fully complies with UL 1741 CRD. Ground fault protection (GFP) is integrated into the Delta string inverter which meets the requirements of NEC 690.35.

Tighten the RSS to the rail with 3x 1/4" (6 mm) hardware, recommended torque 45 in-lbs (5 Nm).

A threaded hole (M4) is provided for equipment grounding. Make sure the cross-section of grounding conductor $\geq 3.3\text{mm}^2$ (12AWG) for copper conductor or $\geq 5.3\text{mm}^2$ (10AWG) for aluminum or copper-clad aluminum conductor per UL 1741 clause 18, recommended torque 16 in-lbs (1.8 Nm).

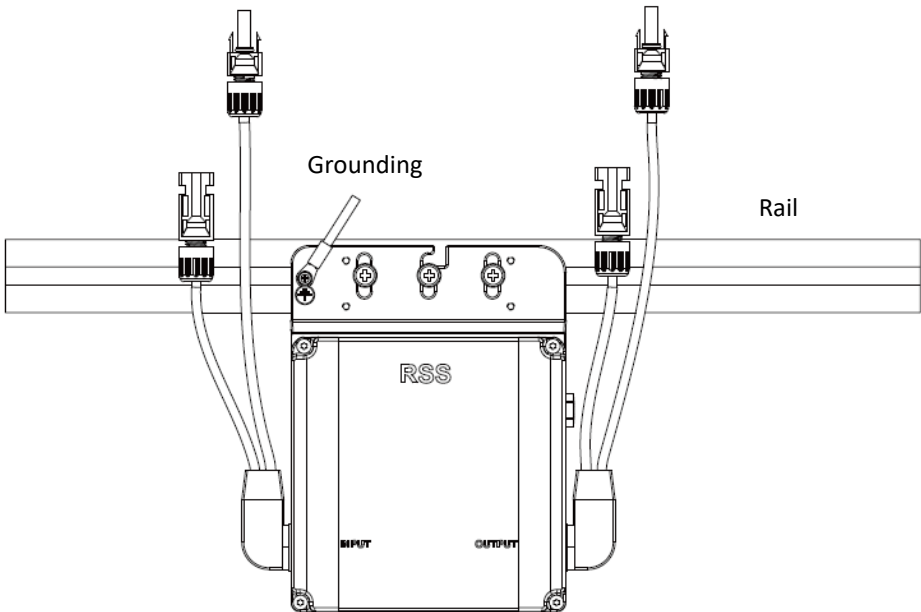


Figure 1: Installation RSS and grounding

- **Attach the SMART RSS box**

Mount the SMART RSS under the PV module, away from rain and sun.

- **Manage wire**

Attach the cabling to the rack using cable clips or tie wraps. Manage any excess wire so that it does not contact the roof.

- **Connect Input and Output of SMART RSS**

Route the DC output conductors to the DC input terminals in the inverter. Directly connect the PV strings to the input of SMART RSS. Listen for two clicks as the connectors engage.

- **Energize the System**

If applicable, turn on the DC switch of the inverter, then turn ON the AC disconnect or circuit breaker for the branch circuit. Turn ON the main utility-grid AC circuit breaker. The SMART RSS will startup and allow the contactors close inside the SMART RSS box after a successful self- test.

- **Marking the System**

PV systems with rapid shutdown ability shall be properly labeled according NEC 690.56 (B) and (C). The signage shall permanently indicate, at the service entrance.

Operation of the SMART RSS

- **Activate Rapid Shutdown**

Turn off AC breaker which connects to the inverter, then the SMART RSS will be activated. **When the inverter loses utility power, the DC feeders between the SMART RSS device and the inverter become de-energized below 30V within 10 seconds.** For safety, disconnect DC switch immediately after initiating rapid shutdown.

- **Self-test Function**

Under normal operating condition, self-test occur each day during start-up. Failure of the self-test will initiate a continuous alarm. The device will continue conducting the self-test until successfully completed. Devices that fail to complete self-test need to be replaced by a qualified service technician.

Delta Products Corporation, Inc.

46101 Fremont Blvd,
Fremont, CA 94538

Sales Email: ASP.Sales@delta-corp.com
Support Email: ASP.Support@delta-corp.com
Sales Hotline: +1-877-440-5851 or
+1-626-369-8021
Support Hotline: +1-877-442-4832
Support (Intl.): +1-626-369-8019
Monday to Friday from 8 am to 5 pm PST (apart from Holidays)

