Soiling & Irradiance Measurement Kit 810262-00
Quick Start Guide

Mount Devices to Plate

- Tools required: Phillips #2 screwdriver and adjustable wrench
- Use included hardware and mount RC18s, as shown
- The Bus Box can be mounted underneath one of the RC18s using the long screws.
- Or mount the Bus Box remotely, if desired
- Save RC18 Calibration Certificates for your local files

Install Labels

- Clean surfaces with the alcohol wipe
- Install the 3 install labels, as shown
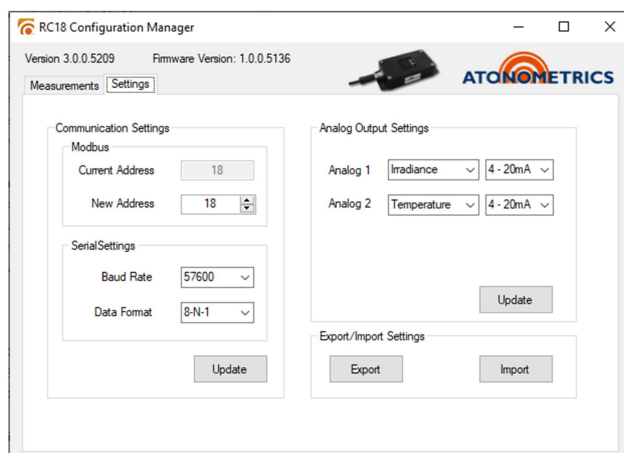
Configure RC18

- Use RC18 Config Software 500078
- Refer to RC18 User Guide 880058
- Optional Config Kit 810235-01 can be used to provide power and communicate to a laptop or PC
- Configure each RC18 one at a time
- Set different Modbus RTU Addresses for both RC18s, but both need the same baud rate, etc
- Configure all RC18 Analog Outputs to "Off"
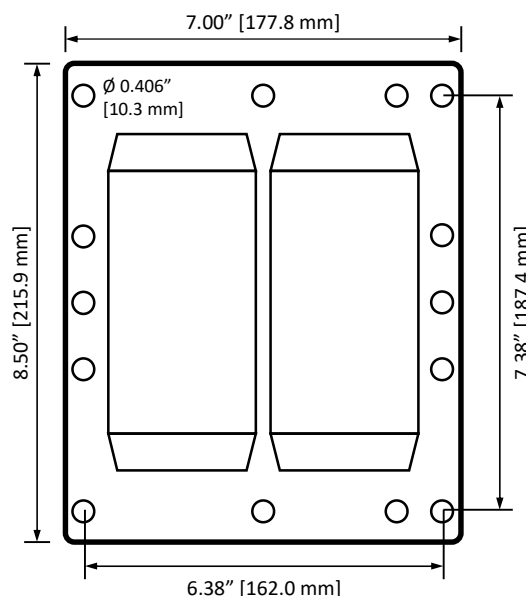
Connect Included Cables to Bus Box

- Attach the a cable from each RC18 to an unused port on the Bus Box
- Test communication with both RC18s – attach Config Kit to Bus Box, then use the RC18 Config Software
- Ensure that **all** unused Bus Box connectors are tightly sealed with a dust cap

Connect 830256-xx Cable from Bus Box to Logger

- 830256-xx cables are purchased separately and are available in several different lengths to meet customer requirements
- Refer to RC18 User Guide 880058 for wiring
- Ensure that **all** unused Bus Box connectors are tightly sealed with a dust cap

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Mounting Plate Dimensions

7.00" [177.8 mm]

Ø 0.406" [10.3 mm]

8.50" [215.9 mm]

7.38" [187.4 mm]

6.38" [162.0 mm]

Specifications

Main Data	Product	Soiling & Irradiance Kit – Dual RC18 Reference Cells
	Input power	8-28 VDC
	Current consumption	Both cells together, typ. 16-30 mA
	Irradiance measurement range	0 to 1500 W/m^2
	Irradiance resolution	0.1 W/m^2
	Soiling ratio measurement range	0.00 – 1.00
	Soiling ratio precision	1%
	Operating temperature	-35 to 80 °C
	Outdoor rating	IP67
	Calibration data	Internally calibrated; no calibration data to manage
Communication	Protocol	Modbus over RS485, user-settable Modbus addresses
	Baud rate	Up to 57.6k
Dimensions	Dimensions	Mounting plate: 7.00 in. x 8.50 in. / 177.8 mm x 215.9 mm
	Weight	2.0 lb / 0.9 kg
	Mounting	See diagram
Optional Cable to Logger	Type	Shielded, weather resistant, UV-rated, 24 awg / 0.2 mm^2
	Part Number	830256-xx
	Length options	4 m, 10 m, 25 m, 50 m, 100 m
	Connector	M12 circular connector, IP67
	Pinout	Refer to RC18 User Guide 880058
Standards		IEC 61724-1 Class A, IEC 60904-2, IEC 60904-3, IEC 60904-10
		CE

Questions:

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