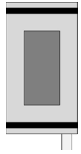# ATERSA 5V | CALIBRATED CELLS

CABLE RECOMMENDATION

Signal cable up to 150m: **6x0.5 mm² + shield**. For longer cable, please consult sensor manufacturer.

SENSOR WIRING TABLE

Sensor Model	Manufacturer Cable Colors		Kintech Cable Colors		Orbit 360			EOL Zenith	
					Section	Terminal	Type	Section	Terminal
	⚪ White	GND	🟤 Brown		Analog Channels	47 51 55 59 64 68 72 76 80 87	(-)	BAT	−
	🟡 Yellow	Radiation	🟡 Yellow		Analog Channels	48 52 56 60 65 69 73 77 81 84 85 86 90 91 92	Signal	Analog Inputs / Extra Analog	1 2 3 4 5 / 1 2 3 4 5 6 7 8
	🟢 Green	Cell Temp.	⚪ White		Analog Channels	48 52 56 60 65 69 73 77 81 84 85 86 90 91 92	Signal	Analog Inputs / Extra Analog	1 2 3 4 5 / 1 2 3 4 5 6 7 8
	🟤 Brown	Ambient Temp.	⚪ Grey		Analog Channels	48 52 56 60 65 69 73 77 81 84 85 86 90 91 92	Signal	Analog Inputs / Extra Analog	1 2 3 4 5 / 1 2 3 4 5 6 7 8
	⚪ Grey	VCC	🟢 Green		Power Input	⊕		BAT	+
			🩷 Pink		Do not connect				
	Shield		🟡🟢 Yellow Green		Power Input	⏚		BAT	⏚

REQUIRED DATA LOGGER VERSION

Minimum data logger required: **ORBIT 360 BASIC PLUS**.
Minimum **firmware** required: **any**.

HOW TO CONFIGURE IN ATLAS

Start Atlas and open the data logger you are working on. Now go to *Site settings* and scroll down to the *Channels* section and select the following type and model:

IRRADIANCE
- Group: Analog channels
- Sensor Type: Voltage
- Sensor Model: **Volts**
- Slope: 250
- Offset: 0

CELL TEMPERATURE
- Group: Analog channels
- Sensor Type: Voltage
- Sensor Model: **Volts**
- Slope: 30
- Offset: -20

AMBIENT TEMPERATURE
- Group: Analog channels
- Sensor Type: Voltage
- Sensor Model: **Volts**
- Slope: 30
- Offset: -20

Important! Please make sure you are working with the latest version of Atlas. To check for new updates click the *Check for updates* button in the left-hand menu located in the main dashboard.

For more information please contact **support@kintech-engineering.com** or visit our website **www.kintech-engineering.com**

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ATERSA 5V | CALIBRATED CELLS

HOW TO CONFIGURE THIS SENSOR ON SITE

We recommend performing the entire sensor configuration using Atlas at the office before installing sensors onsite. Once the sensor is correctly setup in Atlas, use the *Upload settings* tool, to upload the sensor configuration to the data logger.

In case you are already on site and need to configure the sensor directly on the data logger, follow these steps:

1. Turn on the data logger.
2. Using the keypad on the data logger, navigate the menu until you see *Sensor model*, then click the "right arrow" on the keypad.
3. Now scroll down to the channel you are going to connect the sensor to, and click the "right arrow" on the keypad.
4. Now click "Set" on the keypad and scroll up in the menu to set the sensor model type according to the table here below. Once you have found the correct sensor model, click the "right arrow" key twice to select it and save.
5. Click the "left arrow" several times to go back to the main menu.

Data logger model	Firmware version	Sensor model type on data logger		
		Magnitude	Number	Name
ORBIT 360	any	Irradiance	01	milliVolts
		Cell temperature	01	milliVolts
		Ambient temperature	01	milliVolts
EOL ZENITH	any	Irradiance	01	miliVolts
		Cell temperature	01	miliVolts
		Ambient temperature	01	miliVolts

Keep in mind: if the sensor channel has been configured as milliVolts, the output values on data logger display will always be shown in milliVolts. Remember to fill in both the slope and the offset for the pyranometer sensor to see real sensor values in **W/m² and °C** in your datasets during a real-time connection with the data logger (from either Atlas or Atlas Mobile).

HOW TO CONFIGURE IN EOL MANAGER

Open EOL Manager and go to *Settings* of the data logger you are working on. Open the *Inputs* tab and select the following type and model:

IRRADIANCE
- Group: Analog Inputs
- Sensor Type: Voltmeter
- Sensor Model: **Generic Voltimeter**
- Slope: 250
- Offset: 0

CELL TEMPERATURE
- Group: Analog Inputs
- Sensor Type: Voltmeter
- Sensor Model: **Generic Voltimeter**
- Slope: 30
- Offset: -20

AMBIENT TEMPERATURE
- Group: Analog Inputs
- Sensor Type: Voltmeter
- Sensor Model: **Generic Voltimeter**
- Slope: 30
- Offset: -20

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For more information please contact **web@kintech-engineering.com**
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