# **EKO MS40** | PYRANOMETER

### **SENSOR WIRING TABLE**

Sensor	Man	ufacturer	Kintech AMPVAR*				Orbit 360			EOL Zenith	
Model Cable Colors			Kinte	h Colo	ors	Section	Terminal	Туре	Section	Туре	
	•	Brown	А	К	•	Brown	Analog Channels	47 51 55 59 64 68 72 76 80 87	(-)	Analog Inputs	
MS40	0	White	В	L		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
mV output		I		Н	•	Green	Power Input	•	I	BAT	+
				G	G Do not connect						

**Note:** \*AMPVAR amplifier is provided by Kintech Engineering.

Consult to the Solar department (solar@kintech-engineering.com) for its configuration and Slope and Offset.

Sensor		Sensor Pin			Kintech Connector				Orbit 360			EOL Zenith	
	Model	Manufacturer Colors		R: 249Ω (1%)				Section	Terminal	Туре	Section	Туре	
							0	White	Analog Channels	47 51 55 59 64 68 72 76 80 87	(-)	Analog Inputs	
4			Grey	Supply (-)	S			Green	Analog	48 52 56 60 65 69 73 77 81 84	Signal	Analog Inputs	1 2 3 4 5
	MS40S		diey	Supply (-)	3			Green	Channels	85 86 99 92	Signat	Extra Analog	1 2 3 4 5 6 7 8
	4-20mA output		White	4-20mA (-)	-		•	Black	Power Input	(-)		BAT	-
			Brown	Supply (+)	+			Red	Power Input	•		BAT	+
			Do not connected										

Sensor		Sensor Pin			Kintech C	Connec	tor	Orbit 360			EOL Zenith	
Model	Ма	nufactur	er Colors	R: 249Ω (1%)		Section	Terminal	Туре	Section	Type		
						•	Black	Analog Channels	47 51 55 59 64 68 72 76 80 87	(-)	Analog Inputs	-
MS40A 4-20mA output	0	White	Signal (-)	В		•	Green	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
23.5646		Brown	Signal (+)	Α	<b>──</b>	•	Red	Power Input	•	I	BAT	+

Note:  $4 \text{ mA} \rightarrow 0 \text{ W/m}^2$ ;  $20\text{mA} \rightarrow 1600 \text{ W/m}^2$ 

## **REQUIRED DATA LOGGER VERSION**

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

Minimum firmware required: any.



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**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.

#### **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:

MS40S/MS40 (mV output)
• Group: Analog channels
• Sensor Type: Radiation
• Sensor Model: **Thermopile** 

MS40S/MS40A (4-20mA output)
• Group: Analog channels
• Sensor Type: Radiation
• Sensor Model: **Thermopile** 

Slope: 401.6064Offset: -400

#### **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 la gray ma dal	Figure vegetar	Sensor model type on data logger					
Data logger model	Firmware version	Magnitude Number		Name			
ORBIT 360	any	Solar radiation	42	THERMOPILE			
EOL ZENITH	any	Solar radiation	42	THERMOPILE			

### **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:

MS40S/MS40 (mV output)

• Group: Analog Inputs

• Sensor Type: Radiation

• Sensor Model: **Thermopile** 

MS40S/MS40A (4-20mA output)

Group: Analog Inputs Sensor Type: Radiation Sensor Model: Thermopile

Slope: 401.6064Offset: -400

