USER GUIDE Set up an Analog Sensor in the Cloud

Getting started

Add a new sensor

• Go to Devices in the Administration page and find the device you wish to set up an analog sensor on. Add a new sensor, or use an existing one if already in use.

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		0		Tempera	ture				A 🖸 🖬	
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E										



Open sensor settings

• Find your sensor in the sensor overview by searching for it.

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• Open up the sensor settings

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mi	÷	Temperature < LIVE ALARMS >			:
ка ((+))	30M	1H 4H 8H 12H 24H 48H 1W 🛱 🛌	۵	Sensor setti	ngs
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Configure the sensor

• In the "Basic information" tab choose "Measurement" from the drop down menu.

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6	blackbird-demo	D USERS	GROUPS	ROLES	SENSORS	DEVICES	LINES	ORGANIZATION	
(Manage sensor settings							×	
Ĩ	BASIC INFORMATION	Sensor name * Temperature							I
	DATA	Sensor description							I
	LINE SETUP	Select sensor type							
l	MISSING DATA ALARMS	Counter A regular counting sensor, which Counter Speed	transmits the count sir	nce last publish					I
L		Counter Accumulate	ed into a counter						
L		Measurement A direct value of a measurement	: e.g. temperature, pres:	sure, speed - requires a se	nsorUnit			ATION	
		Event An event sensor, meaning it only	triggers on changes (i.	e. not periodically)					
		Discrete A sensor that transmits one of a Manual Process	limited number of state	s that the line can be in					
E		wandal Process							

• Go to the "Sensor setup" tab

Select the "ANALOG" wiring Select "Use analog input range"

6	Clamp-on energ	ıy meter	< LIVE	ALARMS	>	:
()	Manage sensor setting	IS				×
	BASIC INFORMATION	The type of wiring for the attached sensor ANALOG			¥	•
n -	SENSOR SETUP	● Use analog input range ○ Scale input value	0			
3	DATA	Analog sensor range * 4 to 20 mA			•	0
	LINE SETUP	Sansar minimum (4 mÅ) *		Sensor maximum (20 mÅ) *		
	MISSING DATA ALARMS			20		0
		Data multiplier	Ø			- 1
		All fields marked with an asterisk (*) are required.For help with these	settings check out or Help Center for d	ocumentation.		- 1
					X DISCARD CHANGES 🗸 UPDATE SENSOR CONFIG	BURATION

• Set the analog sensor range.

If using a Factbird Duo with a DP2200 converter, make sure to select "4-20 mA". If using a Factbird Duo with a DP1222 converter, make sure to select "0-10 V".

Clamp-on energy	gy meter		ALARMS	>	
Manage sensor setting	gs				×
BASIC INFORMATION	The type of wiring for the attached sensor ANALOG			•	C
SENSOR SETUP	● Use analog input range ○ Scale input va	lue 🕐			
DATA	Analog sensor range *			v	6
LINE SETUP	4 to 20 mA				
MISSING DATA ALARMS	Sensor minimum (4 mA) * O		Sensor maximum (20 mA) * 20		?
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				X DISCARD CHANGES V UPDATE SENSOR CONFIG	URATI

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Set the sensor input range

• Set the input range of the sensor. To set this, we need information from the specific analog sensor. These values are most often found on the label on the sensor itself. Example: a current sensor has an input range 0 to 20 A. In this case the minimum value 0 is entered and the maximum value 20 is entered (see image below)

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← Clamp-on	energy meter	< LIVE	ALARMS >	
Manage sensor se	ttings			×
BASIC INFORMATION	The type of wiring for the attached sensor ANALOG			·
SENSOR SETUP	Use analog input range Scale input value	e 🕜		
DATA	Analog sensor range * 4 to 20 mA			~ @
LINE SETUP	Sensor minimum (4 mA) *		Sensor maximum (20 mA) * 20	e
	Data multiplier	0		
	All fields marked with an asterisk (*) are required. For help with thes	e settings check out or <u>Help Center</u> for d	locumentation.	
			× Disc	ARD CHANGES 🗸 UPDATE SENSOR CONFIGURATIO
1.4 Wh	3.7 w			

Set a data multiplier (if needed)

This field scales the sensor reading by a number. This can be necessary in some cases where the output is not in the desired format or magnitude. For normal readings of temperature, humidity or similar, this is not necessary to set.

Example of use: An electrical current sensor is set up to measure on a 230 V cable. To turn this measurement into a power reading (W), the electrical current can be multiplied by the voltage of the cable. In the example below we have entered 230 because the current sensor is placed on a 230 V cable.

	< <u> </u>	LIVE	ALARMS	>
The type of wiring for the attached sensor ANALOG				
	0			
A Lico analog input rango	nnut value			
Use analog input range O Scale i	nput value 🛛 🖤			
Use analog input range Scale i Analog sensor range * 4 to 20 mA	nput value 🛛 🧐			
Use analog input range Scale i Analog sensor range * 4 to 20 mA Score empiritum (A mA) *	nput value 🛛 🖤		concor maximum (20 mA) *	
Use analog input range Scale i Analog sensor range * to 20 mA Sensor minimum (4 mA) * 0	nput value 🦉	s 2	iensor maximum (20 mA) * 2 0	
Use analog input range O Scale i Analog sensor range * 4 to 20 mA Sensor minimum (4 mA) * 0 Data multiplier 230	nput value	82	iensor maximum (20 mA) * 20	
Use analog input range \ Scale i Analog sensor range * 4 to 20 mA Sensor minimum (4 mA) * 0 Data multiplier 230	nput value	s 2	iensor maximum (20 mA) * 20	

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5

Set the data unit

Setup the data unit for correctly displaying values in the diagram. Go to "Data" tab and select the data unit for your sensor. In our case we chose the values to fit our power sensor.

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	Manage	sensor settings						×	
نه آ	BASIC IN	FORMATION	Data unit *						
	SENSOR	SETUP	Power						
4	DATA		W						
	LINE SET	UP							
	MISSING	DATA ALARMS							
							X DISCARD CHANGES 🗸 UPDATE	SENSOR CONFIGURATIO	м
	Consur	ned	Average						



Save the changes

Press "Update sensor configuration" to apply changes to the sensor setup.

Troubleshooting

Wrong values displayed

If you are using a Factbird Duo v2, the analog converter (DP2200) that came with the Duo only supports 4-20 mA analog signals. Make sure you only use analog sensors with this output range.

If you are using a Factbird Duo, the analog converter (DP1222) that came with the Factbird Duo only supports 0-10 V analog signals. Make sure you only use analog sensors with this output range.