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WARNING

The following is a series of wiring diagrams for several different sensors. Please locate the sensor you are going to use in the list below and follow the corresponding wiring diagram and setup in either Atlas or EOL Manager.

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

HUKSEFLUX SR30-M2-D1 | PYRANOMETER

OUTPUT: RS485

SENSOR WIRING TABLE

Sensor Model	Sensor Pin		Manufacturer Cable Colors		Orbit 360		
					Section	Terminal	Type
	RS_A	RS485 (A)	○	White	RS485	33 37 41	A1, A2, A3
	RS_B	RS485 (B)	●	Grey	RS485	34 38 42	B1, B2, B3
	RS_(-)	Data GND	●	Blue	RS485	35 39	(-)
	(+)	Vcc (+)	●	Brown	Power Input	+	
	(-)	GND	●	Black	Power Input	(-)	
	Shield		●	Yellow	Power Input	⏚	

Note: *This sensor has to be preconfigured before it is configured in Atlas software.*

RS485 DIGITAL OUTPUT:

Parameter	Sensor settings
Baudrate	9600
Data bits	8
Parity	None
Stop bits	1

REQUIRED DATA LOGGER VERSION

Minimum data logger required: **ORBIT 360 PREMIUM**.
Minimum **firmware** required: **2.41**.

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. The variables from the digital output signal can be chosen (or assigned) to either a frequency or an analog channel according to the list here below.

Example:

Serial bus 1 baud rate: 9600bps
Bus: Serial 1 >>> ID: A >>> Sensor model: Pyranometer SR-xx-Dx >>> Name: SRxx_SERIAL1_A

- Group: Analog channels
- Sensor Type: Serial device
- Sensor Model: **SRxx_SERIAL1_A**
  - Sensor Model: **Compensated GI**
  - Sensor Model: **Tilt**
  - Sensor Model: **Heater Current**
  - Sensor Model: **Fan Speed**

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.

Sensor response time: **264ms**.
The sum of the response times of all the sensors connected to the same bus must not exceed 850ms.

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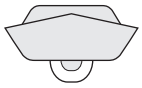
HUKSEFLUX SRA30-M2-D1 | ALBEDOMETER

OUTPUT: RS485

SENSOR WIRING TABLE

Sensor Model	Sensor Pin		Manufacturer Cable Colors		Orbit 360		
					Section	Terminal	Type
 Global Radiation	RS_A	RS485 (A)	○	White	RS485	33 37 41	A1, A2, A3
	RS_B	RS485 (B)	●	Grey	RS485	34 38 42	B1, B2, B3
	RS_(-)	Data GND	●	Blue	RS485	35 39	(-)
	(+)	Vcc (+)	●	Brown	Power Input	+	
	(-)	GND	●	Black	Power Input	(-)	
	Shield		◐	Yellow-Green	Power Input	⏚	
 Reflected Radiation	RS_A	RS485 (A)	○	White	RS485	33 37 41	A1, A2, A3
	RS_B	RS485 (B)	●	Grey	RS485	34 38 42	B1, B2, B3
	RS_(-)	Data GND	●	Blue	RS485	35 39	(-)
	(+)	Vcc (+)	●	Brown	Power Input	+	
	(-)	GND	●	Black	Power Input	(-)	
	Shield		◐	Yellow-Green	Power Input	⏚	

Note: *This sensor has to be preconfigured before it is configured in Atlas software.*

RS485 DIGITAL OUTPUT:

Parameter	Sensor settings
Baudrate	9600
Data bits	8
Parity	None
Stop bits	1

REQUIRED DATA LOGGER VERSION

Minimum data logger required: **ORBIT 360 PREMIUM**.
Minimum **firmware** required: **2.41**.

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. The variables from the digital output signal can be chosen (or assigned) to either a frequency or an analog channel according to the list here below.

HUKSEFLUX SRA30-M2-D1 | ALBEDOMETER

OUTPUT: RS485

Example:

Serial bus 1 baud rate: 9600bps

Bus: Serial 1 >>> ID: A >>> Sensor model: Pyranometer SR-xx-Dx >>> Name: SRxx_SERIAL1_A

GLOBAL RADIATION

- Group: Analog channels
- Sensor Type: Serial device
- Sensor Model: **SRxx_SERIAL1_A**
    - Sensor Model: **Compensated GI**
    - Sensor Model: **Tilt**
    - Sensor Model: **Heater Current**
    - Sensor Model: **Fan Speed**

REFLECTED RADIATION

- Group: Analog channels
- Sensor Type: Serial device
- Sensor Model: **SRxx_SERIAL1_A**
    - Sensor Model: **Compensated GI**
    - Sensor Model: **Tilt**
    - Sensor Model: **Heater Current**
    - Sensor Model: **Fan Speed**

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.

Sensor response time (each): **264ms**.

The sum of the response times of all the sensors connected to the same bus must not exceed 850ms.

HUKSEFLUX SR20-D2 | PYRANOMETER

OUTPUT: RS485

SENSOR WIRING TABLE

Sensor Model	Sensor Pin		Manufacturer Cable Colors		Orbit 360		
					Section	Terminal	Type
	RS_A	RS485 (A)	○	White	RS485	33 37 41	A1, A2, A3
	RS_B	RS485 (B)	●	Green	RS485	34 38 42	B1, B2, B3
	(+)	Vcc (+)	●	Red	RS485	36 40	*(+)
	(-)	GND	●	Blue	RS485	35 39	(-)
	Shield		●	Black	Power Input	⏚	

Note: **(+) = Bat+ with current limited (200mA). Only 1 sensor must be powered per terminal.*
This sensor has to be preconfigured before it is configured in Atlas software.

RS485 DIGITAL OUTPUT:

Parameter	Sensor settings
Baudrate	9600
Data bits	8
Parity	None
Stop bits	1

REQUIRED DATA LOGGER VERSION

Minimum data logger required: **ORBIT 360 PREMIUM**.
Minimum **firmware** required: **2.41**.

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. The variables from the digital output signal can be chosen (or assigned) to either a frequency or an analog channel according to the list here below.

Example:

Serial bus 1 baud rate: 9600bps

Bus: Serial 1 >>> ID: A >>> Sensor model: Pyranometer SR-xx-Dx >>> Name: SRxx_SERIAL1_A

- Group: Analog channels
- Sensor Type: Serial device
- Sensor Model: **SRxx_SERIAL1_A**
    - Sensor Model: **Compensated GI**

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.

Sensor response time: **29ms.**
The sum of the response times of all the sensors connected to the same bus must not exceed 850ms.

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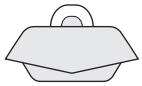
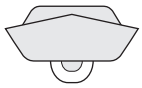
HUKSEFLUX SRA20-D2 | ALBEDOMETER

OUTPUT: RS485

SENSOR WIRING TABLE

Sensor Model	Sensor Pin		Manufacturer Cable Colors		Orbit 360		
					Section	Terminal	Type
 Global Radiation	RS_A	RS485 (A)	○	White	RS485	33 37 41	A1, A2, A3
	RS_B	RS485 (B)	●	Green	RS485	34 38 42	B1, B2, B3
	(+)	Vcc (+)	●	Red	RS485	36 40	*(+)
	(-)	GND	●	Blue	RS485	35 39	(-)
	Shield		●	Black	Power Input	⏚	
 Reflected Radiation	RS_A	RS485 (A)	○	White	RS485	33 37 41	A1, A2, A3
	RS_B	RS485 (B)	●	Green	RS485	34 38 42	B1, B2, B3
	(+)	Vcc (+)	●	Red	RS485	36 40	*(+)
	(-)	GND	●	Blue	RS485	35 39	(-)
	Shield		●	Black	Power Input	⏚	

Note: **(+) = Bat+ with current limited (200mA). Only 1 sensor must be powered per terminal.*
This sensor has to be preconfigured before it is configured in Atlas software.

RS485 DIGITAL OUTPUT:

Parameter	Sensor settings
Baudrate	9600
Data bits	8
Parity	None
Stop bits	1

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. The variables from the digital output signal can be chosen (or assigned) to either a frequency or an analog channel on the Orbit 360 Premium according to the list here below.

Example:

Serial bus 1 baud rate: 9600bps

Bus: Serial 1 >>> ID: A >>> Sensor model: Pyranometer SR-xx-Dx >>> Name: SRxx_SERIAL1_A

GLOBAL RADIATION

- Group: Analog channels
- Sensor Type: Serial device
- Sensor Model: **SRxx_SERIAL1_A**
  - Sensor Model: **Compensated GI**

REFLECTED RADIATION

- Group: Analog channels
- Sensor Type: Serial device
- Sensor Model: **SRxx_SERIAL1_A**
- Sensor Model: **Compensated GI**

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.

Sensor response time: **29ms (each pyranometer).**

The sum of the response times of all the sensors connected to the same bus must not exceed 850ms.

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HUKSEFLUX SR15-D1 | PYRANOMETER

OUTPUT: RS485

SENSOR WIRING TABLE

Sensor Model	Sensor Pin		Manufacturer Cable Colors		Orbit 360		
					Section	Terminal	Type
	RS_A	RS485 (A)		Grey	RS485	33 37 41	A1, A2, A3
	RS_B	RS485 (B)		White	RS485	34 38 42	B1, B2, B3
	(+)	Vcc (+)		Brown	RS485	36 40	*(+)
	(-)	GND		Black	RS485	35 39	(-)
	Shield			Yellow	Power Input	⏚	

Note: **(+) = Bat+ with current limited (200mA). Only 1 sensor must be powered per terminal.*
This sensor has to be preconfigured before it is configured in Atlas software.

RS485 DIGITAL OUTPUT:

Parameter	Sensor settings
Baudrate	9600
Data bits	8
Parity	None
Stop bits	1

REQUIRED DATA LOGGER VERSION

Minimum data logger required: **ORBIT 360 PREMIUM**.
Minimum **firmware** required: **2.41**.

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. The variables from the digital output signal can be chosen (or assigned) to either a frequency or an analog channel according to the list here below.

Example:

Serial bus 1 baud rate: 9600bps

Bus: Serial 1 >>> ID: A >>> Sensor model: Pyranometer SR-xx-Dx >>> Name: SRxx_SERIAL1_A

- Group: Analog channels
- Sensor Type: Serial device
- Sensor Model: **SRxx_SERIAL1_A**
    - Sensor Model: **Compensated GI**

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.

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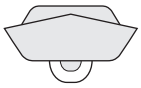
HUKSEFLUX SRA15-D1 | ALBEDOMETER

OUTPUT: RS485

SENSOR WIRING TABLE

Sensor Model	Sensor Pin		Manufacturer Cable Colors		Orbit 360		
					Section	Terminal	Type
 Global Radiation	RS_A	RS485 (A)		Grey	RS485	33 37 41	A1, A2, A3
	RS_B	RS485 (B)		White	RS485	34 38 42	B1, B2, B3
	(+)	Vcc (+)		Brown	RS485	36 40	*(+)
	(-)	GND		Black	RS485	35 39	(-)
	Shield			Yellow	Power Input	⏚	
 Reflected Radiation	RS_A	RS485 (A)		Grey	RS485	33 37 41	A1, A2, A3
	RS_B	RS485 (B)		White	RS485	34 38 42	B1, B2, B3
	(+)	Vcc (+)		Brown	RS485	36 40	*(+)
	(-)	GND		Black	RS485	35 39	(-)
	Shield			Yellow	Power Input	⏚	

Note: **(+) = Bat+ with current limited (200mA). Only 1 sensor must be powered per terminal.*
This sensor has to be preconfigured before it is configured in Atlas software.

RS485 DIGITAL OUTPUT:

Parameter	Sensor settings
Baudrate	9600
Data bits	8
Parity	None
Stop bits	1

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. The variables from the digital output signal can be chosen (or assigned) to either a frequency or an analog channel according to the list here below.

Example:

Serial bus 1 baud rate: 9600bps
Bus: Serial 1 >>> ID: A >>> Sensor model: Pyranometer SR-xx-Dx >>> Name: SRxx_SERIAL1_A

GLOBAL RADIATION

- Group: Analog channels
- Sensor Type: Serial device
- Sensor Model: **SRxx_SERIAL1_A**
  - Sensor Model: **Compensated GI**

REFLECTED RADIATION

- Group: Analog channels
- Sensor Type: Serial device
- Sensor Model: **SRxx_SERIAL1_A**
- Sensor Model: **Compensated GI**

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.

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HUKSEFLUX SR05-D1A3_PV | PYRANOMETER

OUTPUT: RS485

SENSOR WIRING TABLE

Sensor Model	Sensor Pin		Manufacturer Cable Colors		Orbit 360		
					Section	Terminal	Type
	RS_A	RS485 (A)		Grey	RS485	33 37 41	A1, A2, A3
	RS_B	RS485 (B)		White	RS485	34 38 42	B1, B2, B3
	(+)	Vcc (+)		Brown	RS485	36 40	*(+)
	(-)	GND		Black	RS485	35 39	(-)
	Shield			Yellow	Power Input	⏚	

Note: **(+) = Bat+ with current limited (200mA). Only 1 sensor must be powered per terminal.*
This sensor has to be preconfigured before it is configured in Atlas software.

RS485 DIGITAL OUTPUT:

Parameter	Sensor settings
Baudrate	9600
Data bits	8
Parity	None
Stop bits	1

REQUIRED DATA LOGGER VERSION

Minimum data logger required: **ORBIT 360 PREMIUM**.
Minimum **firmware** required: **2.41**.

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. The variables from the digital output signal can be chosen (or assigned) to either a frequency or an analog channel according to the list here below.

Example:

Serial bus 1 baud rate: 9600bps

Bus: Serial 1 >>> ID: A >>> Sensor model: Pyranometer SR-xx-Dx >>> Name: SRxx_SERIAL1_A

- Group: Analog channels
- Sensor Type: Serial device
- Sensor Model: **SRxx_SERIAL1_A**
    - Sensor Model: **Compensated GI**

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.

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