THIES FIRST CLASS ADVANCED X | CUP ANEMOMETER

SENSOR WIRING TABLE

Sensor Model	Sensor Pin		Kintech Colors		Orbit 360		
					Section	Terminal	Type
	1	SIG	○	White	Frequency Channels	2 5 8 11 14 17 20 23 26 29	Signal
	2	GND	●	Brown	Independent power supply 12V/24V DC		
	3	Us (+)	●	Green			
	4	Data (-)	●	Grey	RS485	34 38 42	B
	5	Data (+)	●	Pink	RS485	33 37 41	A
	6	Data GND	●	Yellow	RS485	35 39	(-)
	Shield		◐	Yellow-Green	Power Input	⏚	
	7	Heating (+)	●	Brown	Independent power supply 24 AC/DC		
	8	Heating (-)	●	Blue			

Note: *Base sensor view / Soldering connector view.*

HOW TO CONFIGURE IN ATLAS

Open Atlas and go to the data logger you are working on. Scroll to the “channels” section and set the information related to this sensor. The frequency output signal from the instrument must be connected to one of the frequency channels (FRQ1 to FRQ10) on the Orbit 360. The variables from the digital output signal can be chosen (or assigned) to either a frequency or an analog channel on the Orbit 360 according to the list here below.

Note: The sensor has to be preconfigured before its configured in Atlas.

Example:

Serial bus 1 baud rate: 9600bps

Bus: Serial 1 >>> ID: A >>> Sensor model: Thies X Advanced >>> Name: Thies X Advanced_SERIAL1_A

- Group: Frequency channels
- Sensor Type: Anemometer
- Sensor Model: **Thies First Class Advanced**
- Sensor Type: Serial device

- Sensor Model: **Thies X Advanced_SERIAL1_A**
- Sensor Model: **Corrected Horizontal Speed**
- Sensor Model: **Vibration Freq X**
- Sensor Model: **Vibration Freq Y**

- Group: Analog channels
- Sensor Type: Serial device
- Sensor Model: **Thies X Advanced_SERIAL1_A**
- Sensor Model: **Pressure**
- Sensor Model: **TILT**
- Sensor Model: **Vibration Freq X**
- Sensor Model: **Vibration Freq Y**
- Sensor Model: **Vibration Acc X**
- Sensor Model: **Vibration Acc Y**

USING ANEMOMETER THIES FIRST CLASS ADVANCED X WITH THE ORBIT 360 PREMIUM DATA LOGGER

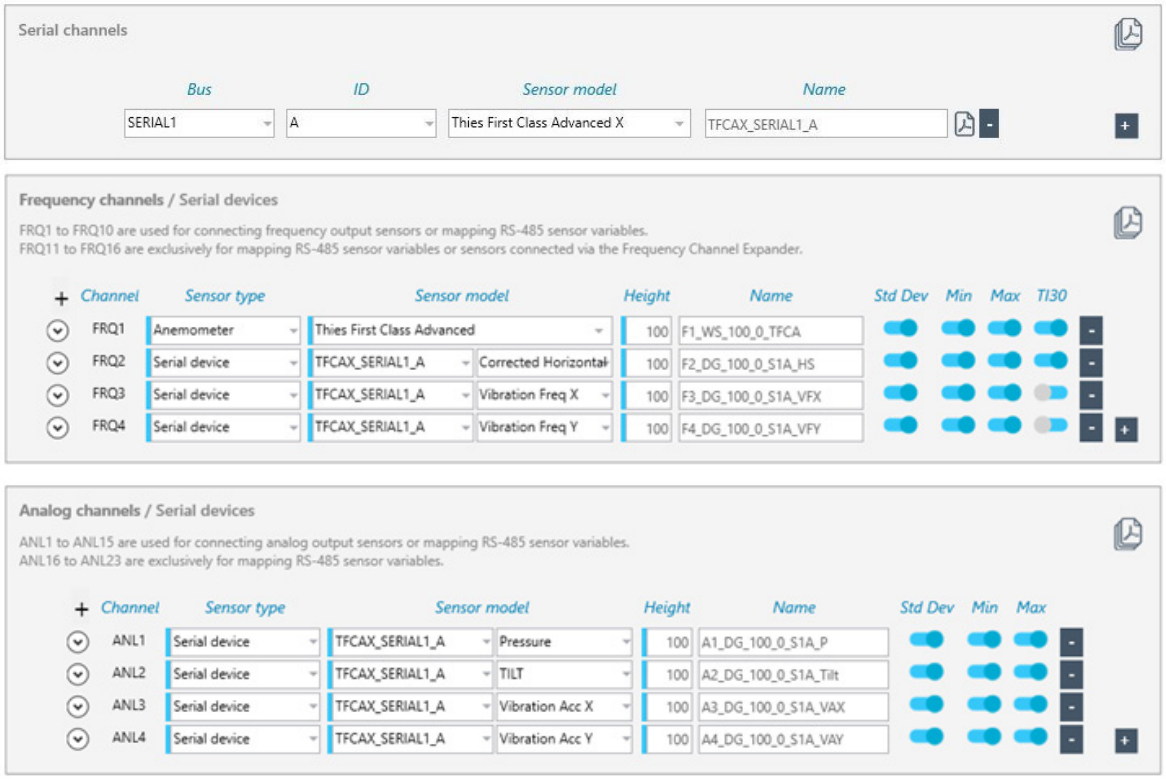
The Orbit 360 Premium data logger is fully compatible with the Thies First Class Advanced X cup anemometer and can store variables from up to 8 devices simultaneously on each of the three RS485 buses.

The Thies First Class Advanced X cup anemometer features both a traditional frequency output signal as well as a new digital output signal. The traditional frequency output from the instrument is used to collect the non-corrected horizontal wind speed (no instrument calibration is applied to the frequency signal). The digital output signal is used to collect the remaining variables from the instrument, including density corrected wind speed, tilt, vibration etc.

Example

In the example below, Atlas is used to configure a Thies First Class Advanced X anemometer.

- Non-corrected wind speed from the frequency output is connected to channels FRQ1
- Corrected wind speed from the digital output is mapped to channel FRQ2
- Vibration Freq X from digital output is mapped to channel FRQ3
- Vibration Freq Y from digital output is mapped to channel FRQ4
- Pressure from digital output is mapped to analog channel ANL1
- TILT from digital output is mapped to channel ANL2
- Vibration Acc X from digital output is mapped to channel ANL3
- Vibration Acc Y from digital output is mapped to channel ANL4



MEASNET CALIBRATION

Several options for Measnet calibration of the Thies First Class Advanced X anemometer are available. For more information, please contact us on **support@kintech-engineering.com.**

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