



**kintech**  
**engineering**

## **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.

## VAISALA WMT70X 2D | ULTRASONIC ANEMOMETER

WMT701 (0...40m/s)

WMT702 (0...65m/s)


WMT703 (0...75m/s)


### CABLE RECOMMENDATION

Signal cable up to 150m: **4x0.5 mm<sup>2</sup> + shield**. For longer cable, please consult sensor manufacturer.

Heating cable cross-section should be calculated based on the power system requirements (Volts and Amps) and the cable length. Please use a wire sizing tool for selecting the most suitable cable.

### SENSOR WIRING TABLE

Sensor Model	Manufacturer colors & Sensor Pin				Kintech Cable Colors		Orbit 360		
							Section	Terminal	Type
	16	RxTXA	○	White	○	White	RS485	34 38 42	B
	9	RxTXB	●	Yellow	●	Yellow	RS485	33 37 41	A
	11	Vin-	●	Brown	●	Brown	Power Input	-	
	10	CGND	●	Grey	●	Brown			
	1	Vin+	●	Pink	●	Green	Power Input	+	
	Shield				●	Yellow-Green	Power Input	⏚	
	5, 6	Vh+			●	Brown	Independent power supply 24 AC/DC		
7, 8	Vh-			●	Blue				

Sensor Model	Manufacturer colors & Sensor Pin				Kintech Cable Colors		ADAM	Charge regulator	*EOL Zenith	
									Section	Terminal
	16	RxTXA	○	White	○	White	DATA-			
	9	RxTXB	●	Yellow	●	Yellow	DATA+			
	11	Vin-	●	Brown	●	Brown		BAT (-)	BAT	-
	10	CGND	●	Grey	●	Brown				
	1	Vin+	●	Pink	●	Green		BAT (+)	BAT	+
	Shield				●	Yellow-Green			BAT	⏚
								Vs (+)	Load (+)	
							GND	Load (-)		
5, 6	Vh+			●	Brown	Independent power supply 24 AC/DC				
7, 8	Vh-			●	Blue					

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

\*EOL Zenith should have the Ultrasonic Module installed by Kintech Engineering beforehand.

## VAISALA WMT70X 2D | ULTRASONIC ANEMOMETER

WMT701 (0...40m/s)

WMT702 (0...65m/s)

WMT703 (0...75m/s)

### REQUIRED DATA LOGGER VERSION

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

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. 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: Vaisala >>> Name: VA\_SERIAL1\_A

- Group: Frequency channels
- Sensor Type: Serial device
- Sensor Model: **VA\_SERIAL1\_A**
  - Sensor Model: **Horizontal Speed**
- Group: Analog channels
- Sensor Type: Serial device
- Sensor Model: **VA\_SERIAL1\_A**
  - Sensor Model: **Windvane**

**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.

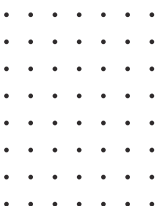
### HOW TO CONFIGURE IN EOL MANAGER

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:

- Group: Anemometer/Frequency
- Sensor Type: Ultrasonic
- Sensor Model: **Vaisala**
- Group: Analog Inputs
- Sensor Type: Ultrasonic
- Sensor Model: **Vaisala**

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For more information please contact [web@kintech-engineering.com](mailto:web@kintech-engineering.com) or visit our website [www.kintech-engineering.com](http://www.kintech-engineering.com)





















































# VAISALA WS425 2D | ULTRASONIC ANEMOMETER

## CABLE RECOMMENDATION

Signal cable up to 150m: **8x0.5 mm<sup>2</sup> + shield**. For longer cable, please consult sensor manufacturer.

## SENSOR WIRING TABLE

Sensor Model	Manufacturer colors & Sensor Pin				Kintech Cable Colors		Orbit 360		
							Section	Terminal	Type
	9	RT-		Green		Green	RS485	  	B
	14	RT+		Grey		Grey	RS485	  	A
	10	RT-		White		White	RS485	  	B
	12	RT+		Yellow		Yellow	RS485	  	A
	1	GND		Brown		Brown	Power Input	-	
	11	12Vdc		Red		Red	Power Input		
	8	GND		Black		Pink	Power Input	-	
	Shield					Yellow-Green	Power Input		
5, 6, 7				Connected together for RS422 and RS485 protocols					

Sensor Model	Manufacturer colors & Sensor Pin				Kintech Cable Colors		ADAM	Charge regulator	*EOL Zenith	
									Section	Terminal
	9	RT-		Green		Green	DATA-			
	14	RT+		Grey		Grey	DATA+			
	10	RT-		White		White	DATA-			
	12	RT+		Yellow		Yellow	DATA+			
	1	GND		Brown		Brown		BAT (-)	BAT	
	11	12Vdc		Red		Red		BAT (+)	BAT	
	8	GND		Black		Pink		BAT (-)	BAT	
	Shield					Yellow-Green			BAT	
							Vs (+)	Load (+)		
							GND	Load (-)		
5, 6, 7				Connected together for RS422 and RS485 protocols						

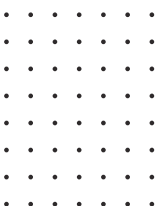
**Note:** This sensor has to be preconfigured before it is configured in Atlas software.

\*EOL Zenith should have the Ultrasonic Module installed by Kintech Engineering beforehand.

## REQUIRED DATA LOGGER VERSION

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

Minimum **firmware** required: **any**



# VAISALA WS425 2D | ULTRASONIC ANEMOMETER

## 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: Vaisala >>> Name: VA\_SERIAL1\_A

- |   |                                     |
|---|-------------------------------------|
| ● Group: Frequency channels             | ● Group: Analog channels            |
| ● Sensor Type: Serial device            | ● Sensor Type: Serial device        |
| ● Sensor Model: <b>VA_SERIAL1_A</b>     | ● Sensor Model: <b>VA_SERIAL1_A</b> |
| ● Sensor Model: <b>Horizontal Speed</b> | ● Sensor Model: <b>Windvane</b>     |

**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 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:

- |                                |                                |
|--------------------------------|--------------------------------|
| ● Group: Anemometer/Frequency  | ● Group: Analog Inputs         |
| ● Sensor Type: Ultrasonic      | ● Sensor Type: Ultrasonic      |
| ● Sensor Model: <b>Vaisala</b> | ● Sensor Model: <b>Vaisala</b> |

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For more information please contact [web@kintech-engineering.com](mailto:web@kintech-engineering.com) or visit our website [www.kintech-engineering.com](http://www.kintech-engineering.com)

