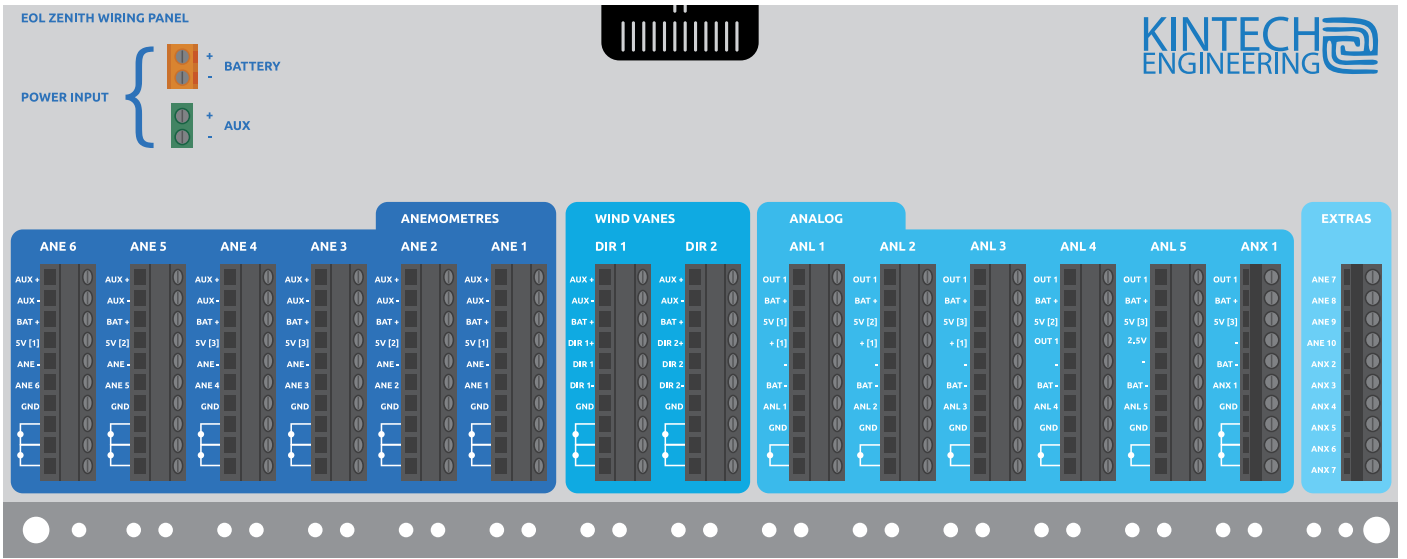


EOL ZENITH WIRING PANEL

PROTECT YOUR DATA



DESCRIPTION

The Wiring Panel for the EOL Zenith data logger is designed to increase the protection of the data logger from electrostatic discharges and make it even easier to connect lots of sensors. In case of a lightning strike the Wiring Panel diverts the energy to the GND/EARTH and thereby protects the data logger.

3-STAGE PROTECTION

As standard the Wiring Panel includes 14 channel protection boards. They reduce or even eliminate the loss of data and data logger failures related to electrostatic discharges. These boards protect each data line separately and can therefore also be replaced individually.

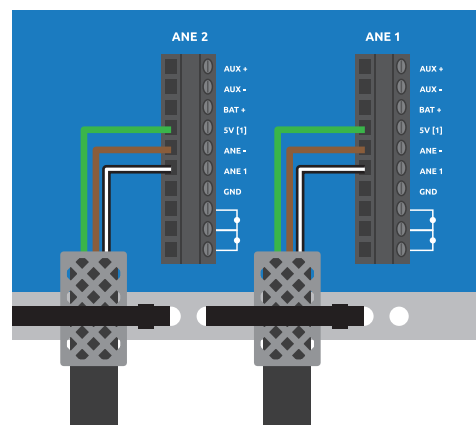
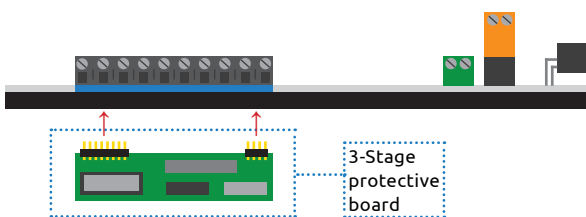
The 3-stage protective boards derive the over-voltage from the signal cable to GND/EARTH.

As the name says, the protection boards have 3 different discharge stages. Each stage has been appropriately designed according to the energy level to be derived. In this way we obtain an adequate response speed and better protection of the data logger.

EASY WIRING

Helps your installer to connect lots of sensors without the hassle and without cluttered sensor cables. With the Wiring Panel you no longer have to share any of the supply or reference inputs between sensors.

Each fixed terminal block on the EOL Zenith Wiring Panel has everything needed to connect a sensor separately.

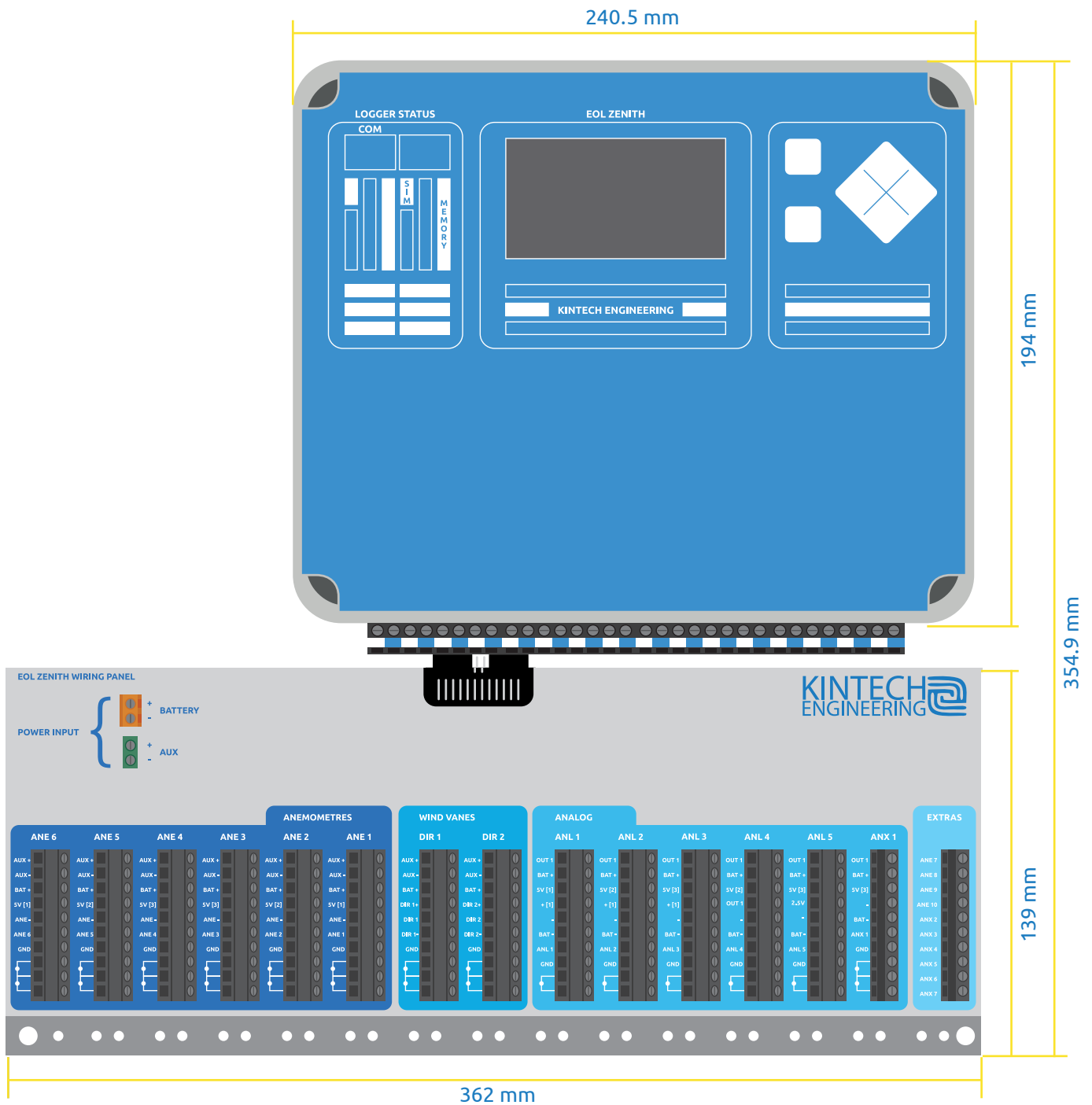


TECHNICAL DATA

EOL ZENITH WIRING PANEL	
CHARACTERISTIC	DESCRIPTION / VALUE
Terminal blocks available	15 for sensors, 1 for battery, 1 for heating supply
Power supply terminal block type	Female plug-in connector, 2 poles, clamping yoke
Power supply wires max section	4 mm ²
Anemometer channels protected	6
Windvane channels protected	2
Analog channels protected	6
Nominal voltage	12 V
Maximum service voltage	30 V
Wires connection method	Screw connection
Conductor cross section solid min.	0.14 mm ²
Conductor cross section solid max.	2.5 mm ²
Dimensions	362 x 139 mm
Weight	570 g

3-STAGE PROTECTION BOARDS	
CHARACTERISTIC	DESCRIPTION / VALUE
Boards supplied with EOL Zenith wiring panel	14
Number of protected wires	3
To protect	Analog and digital sensors
Nominal voltage	12 VDC
Maximum service voltage (U _c)	30 VDC
Protection level (U _p)	≤45 V
Maximum discharge current (I _{max})	5 kA
Nominal discharge current (I _n)	5 kA
Nominal current	300 mA
Response time (T _a)	<1 nseg
Bandwidth (50 Ohms) (f _g)	3 MHz
Operating temperature range	-40...+85 °C
Standards/Regulations	IEC 61643-21
Dimensions	71 mm x 12 mm x 10 mm
Weight	30 g

DIMENSIONS



FASTENING THE WIRING PANEL

The complete wiring panel is inserted into the logger terminals from below and fastened directly on to the data logger. This makes for an adaptable and robust solution for all metal cabinet sizes, and at the same time offers easy access to replace the lightning protectors individually on the backside.

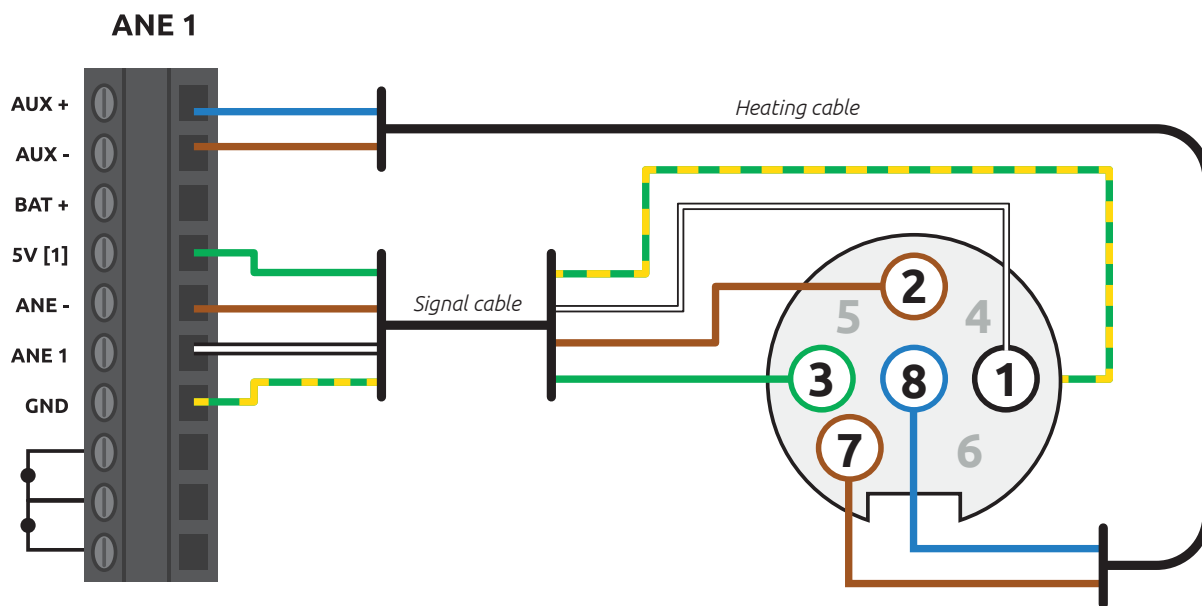
WIRING DIAGRAM

The identification of the sensor channels on the expansion board is identical to the channels on the data logger itself. This means that you can use all your existing wiring diagrams to connect your sensors.

To locate the sensor wiring diagrams go to:

www.kintech-engineering.com → Technical support → Download

Here is an example how to connect an Anemometer Thies First Class Advanced (with heating) using the new Wiring Panel for the EOL Zenith data logger.



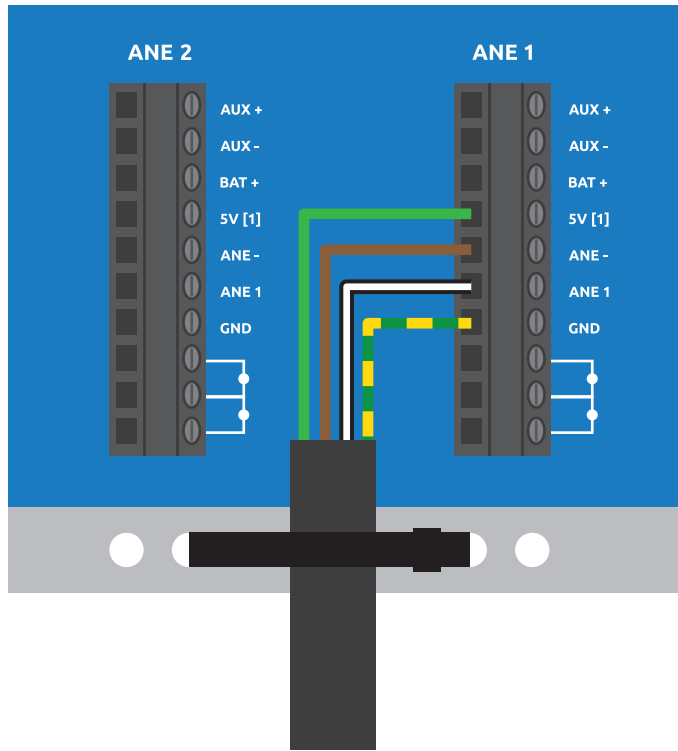
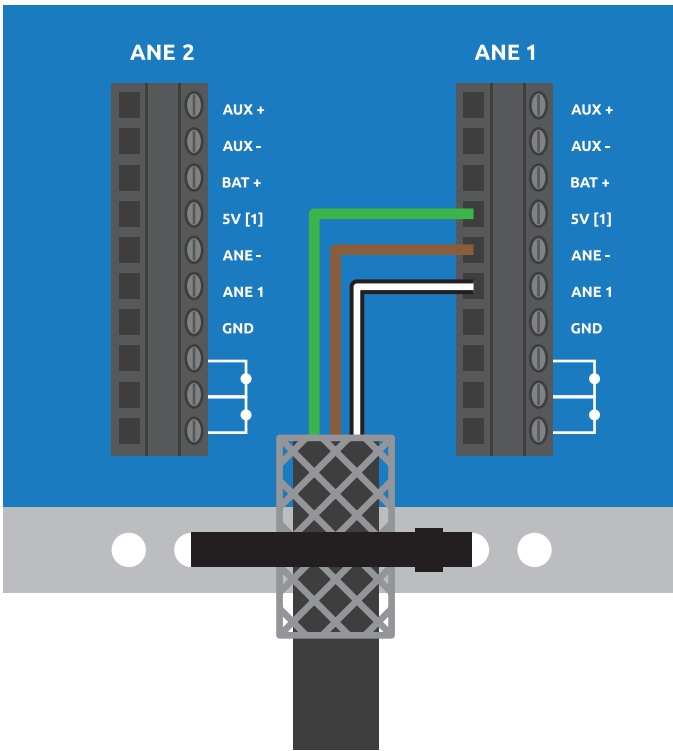
SHIELD CONNECTION

To avoid signals interfering between sensors always use shielded cables and connect the shields to GND points.

With the EOL Zenith Wiring Panel® the shields can be connected in the following two ways:

A Expose the metallic shield mesh from each signal cable (as seen on drawing below).
Connect and tie down the shield mesh to the metal plate.

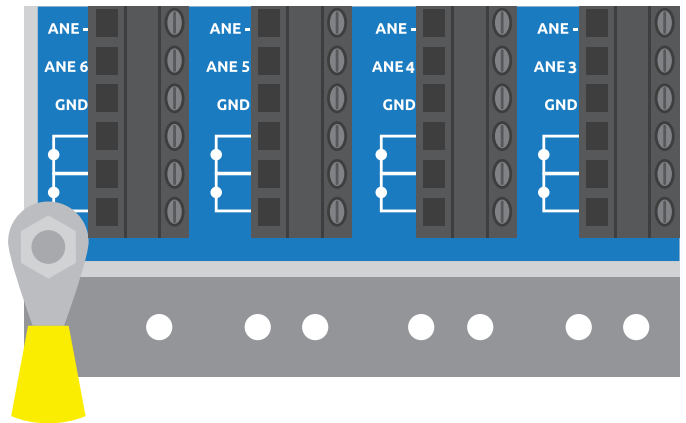
B Solder the metallic shield mesh to the GND yellow/green wire.
Insert the GND yellow/green wire into the GND screw terminal of each channel.



IMPORTANT

For each of the options above, remember to connect the main GND terminal (located in the lower left corner of the EOL Zenith Wiring Panel) to the grounding rod dedicated to the logger.

Connection to an earthing system is essential for a proper operation of the protection.



Last modified: 26.06.2017

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