

SPECIFICATION

Environmental Performance	
Temperature limits	Operation: 0 to +50°C Storage: -20 to 60°C
Humidity limits (Non-condensing)	Operation: 5% to 80% Storage: 5% to 90% RH Altitude (max): >2000 meters
Protection	Bezel and display: IP65 Sleeve: IP20
Shock	BS EN61010
Vibration (10Hz to 150Hz)	BSEN60873 Section 9,18 1g peak
Electromagnetic Compatibility (EMC)	
Emissions/Immunity	BS EN61326
Electrical safety	
	BS EN61010 Installation category II, Pollution degree 2
Power requirements	
Supply voltage	Standard: 100-230V ac ±15%; 47 to 63Hz or 110 to 370V dc
Power (max)	50W
Fuse type	None
Input board	
Isolation	Channel to channel: 300V RMS or dc (double insulation) Channel to ground: 300V RMS or dc (basic insulation)
Overvoltage protection	50 volts peak (150V with attenuator)
Max number channels	48
Relay Board	
Isolation	Relay to relay: 300V RMS (double insulation) Relay to ground: 300V RMS (basic insulation)
Max ratings contact	250V ac 2 Amps
Max switching power	500VA
Max number of relays	9
Serial Communications	
Isolation	Term to ground: 50V RMS or dc (basic insulation)
Event Input	
Isolation	Channel to channel: 0V (common end) Channel to ground: 100V RMS or dc (basic insulation)
Logic level	Low: -30 to +0.8V High: -2 to +30V

PRODUCT SOFTWARE UPGRADE

Refer to "Software Upgrade Instructions" in the documentation folders on the DVD.

SAFETY NOTES

WARNING

Any interruption of the protective conductor inside or outside the apparatus, or disconnection of the protective earth terminal is likely to make the apparatus dangerous under some fault conditions. Intentional interruption is prohibited.

Note: in order to comply with the requirements of safety standard BS EN61010, the recorder shall have one of the following as a disconnecting device, fitted within easy reach of the operator, and labelled as the disconnecting device.

- A switch or circuit breaker which complies with the requirements of IEC947-1 and IEC947-3.
- A separable coupler which can be disconnected without the use of a tool.
- A separable plug, without a locking device, to mate with a socket outlet in the building.

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Scan for
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i n v e n s y s
Operations Management

6180AeroDAQ Installation Instruction

INSTALLATION

Requirements

- The PC must be running Windows XP, SP3, Windows 7, Windows 2008 server.
- For all operating systems, Internet Explorer 8.0 or above must be installed.
- The PC must be set to at least 65536 colours.
- At least 1GB RAM is required, with 2GB preferred.

Procedure

- Insert the DVD into the PC drive. The setup program should run automatically unless 'autorun' has been disabled.
- If the DVD fails to autorun, in Windows Explorer double-click the DVD icon to see contents, then double click the setup.exe file.
- In the **Do Install** section of the dialog, click the required button to start the installation.
- Follow the instructions shown on-screen for each item of the installation.

DVD CONTENTS

Product Documentation The documentation on this DVD is in PDF format, which requires the use of Adobe™ Acrobat™ 4.0 or later to view it. The English language version of Adobe Acrobat 4.0 for Microsoft™ Windows™ NT may be installed from this DVD by following the instructions below.

Adobe Acrobat for other platforms and languages may be downloaded from www.adobe.com.

C-Edit PC based application for the creation and modification of configuration files for all Instruments.

Review PC based application for the offline analysis of archive files.

Review QuickChart An alternative operating mode for Review, provides a simplified method of viewing archived data files.

Bridge PC based application provides a remote view capability of network connected Data Management instruments. Only available if option enabled on recorder.

Security Manager A centralised security system where User Names, Passwords and Access Permissions can be controlled from a central PC.

i n v e n s y s
Eurotherm

6180 AeroDAQ

AMS2750D Data Management Solutions



The software licence On-Screen Licence Agreement Issue A (February 2001) is defined in **license.doc** (and **license.txt**)

READ THE TERMS AND CONDITIONS SET OUT IN **LICENSE.TXT** CAREFULLY BEFORE USING THE SOFTWARE AS BY INSTALLING SOFTWARE SUPPLIED ON DISKS, OR BY USING PRE-INSTALLED SOFTWARE, YOU, THE END USER, ARE AGREEING TO BECOME BOUND TO US, EURO THERM LIMITED, BY THOSE TERMS.

- Before any other connection is made, the protective earth terminal shall be connected to a protective conductor. The mains (supply voltage) wiring must be terminated within the connector in such a way that, should it slip in the cable clamp, the Earth wire would be the last wire to become disconnected.
- In the case of portable equipment, the protective earth terminal must remain connected (even if the recorder is isolated from the mains supply), if any of the I/O circuits are connected to hazardous voltages*.
- The mains supply fuse within the power supply is not replaceable. If it is suspected that the fuse is faulty, the manufacturer's local service centre should be contacted for advice.
- Whenever it is likely that protection has been impaired, the unit shall be made inoperative, and secured against accidental operation. The manufacturer's nearest service centre should be contacted for advice.

- Any adjustment, maintenance and repair of the opened apparatus under voltage, should be avoided as far as possible and, if inevitable, shall be carried out only by a skilled person who is aware of the hazard involved.
 - Where conductive pollution (e.g. condensation, carbon dust) is likely, adequate air conditioning/filtering/sealing etc. must be installed in the recorder enclosure.
 - Signal and supply voltage wiring should be kept separate from one another. Where this is impractical, shielded cables should be used for the signal wiring.
 - If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment might be impaired.
- * A full definition of 'Hazardous' voltages appears under 'Hazardous live' in BS EN61010. Briefly, under normal operating conditions, hazardous voltages are defined as being > 30V RMS (42.2V peak) or > 60V dc.

ELECTRICAL INSTALLATION

Supply Voltage Wiring

AC Supply
Recommended wire size
 16/0.2 (0.5mm²) (AWG20)

Signal Wiring

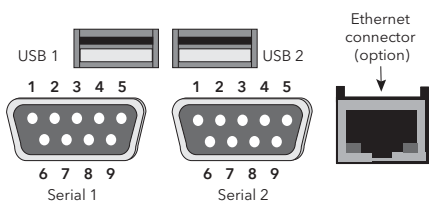
Supply
 See Specification Side 2 for ratings

Recommended wire size
 28-11 AWG (0.081mm² - 4.13mm²)
 Use Copper conductors only
 3.5Lb-in (0.35Nm) Terminal tightening torque

Diagrams show connector locations for the input channel wiring and optional relay output wiring for the basic large frame recorders.

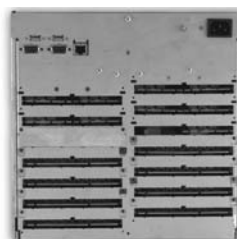


SERIAL COMMS

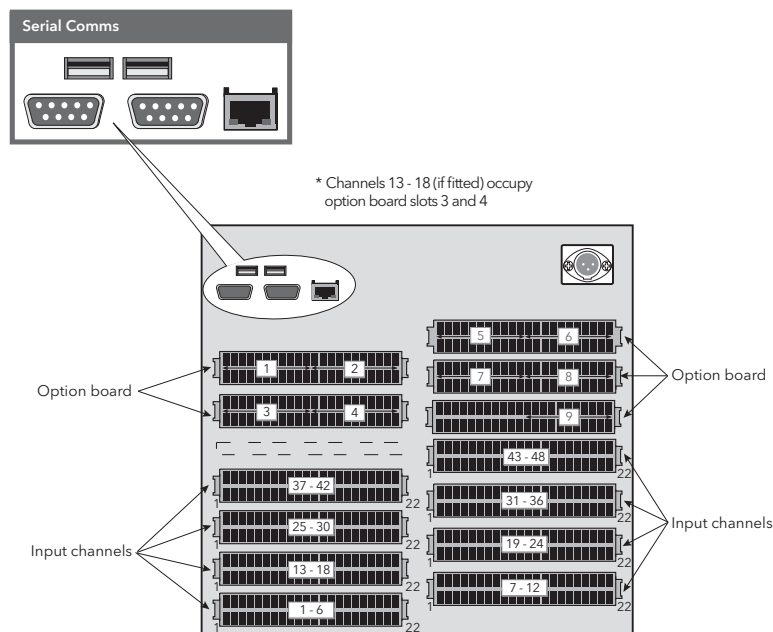


Serial communication port pinout

Pin	EIA232	EIA485 (5-wire)	EIA485 (3-wire)
1	Not connected	RxA	Link to pin 7
2	Rx	Not connected	Not connected
3	Tx	Not connected	Not connected
4	DTR	Not connected	Not connected
5	Signal ground		
6	Not Connected	RxB	Link to pin 8
7	Not Connected	TxA	TxA/RxB
8	Not Connected	TxB	TxB/RxA
9	5.0V via 1500Ω		

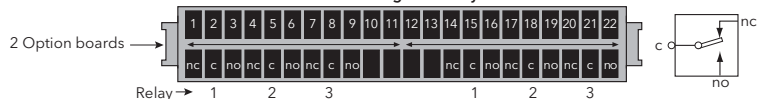


6180AeroDAQ CONNECTION LOCATIONS

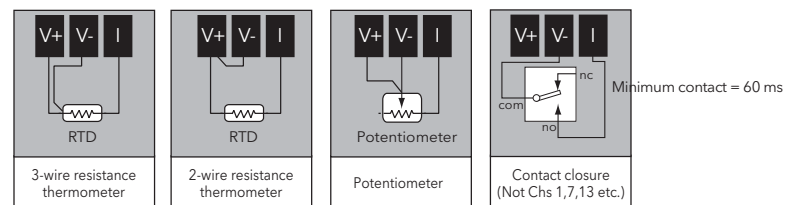
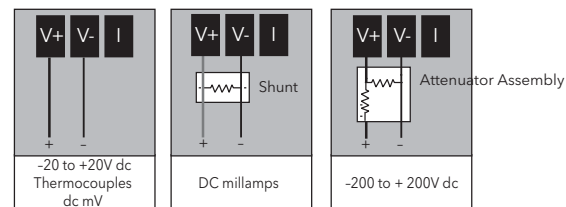
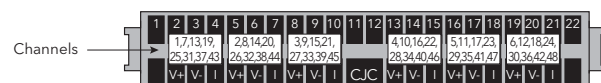


RELAY BOARD WIRING

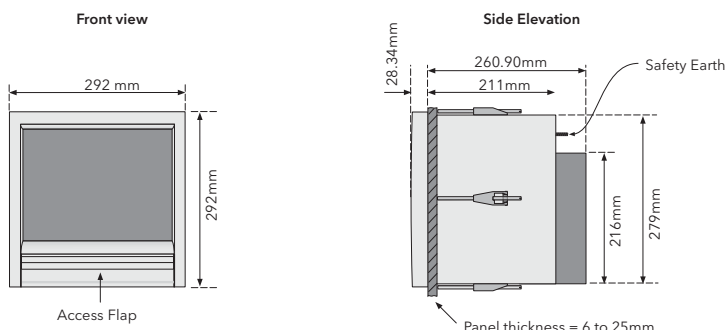
Three changeover relays



INPUT BOARD WIRING

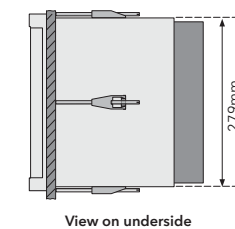
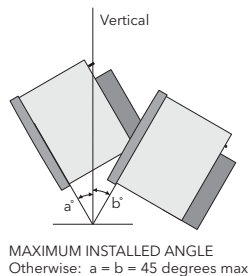


6180AeroDAQ MECHANICAL INSTALLATION DETAILS

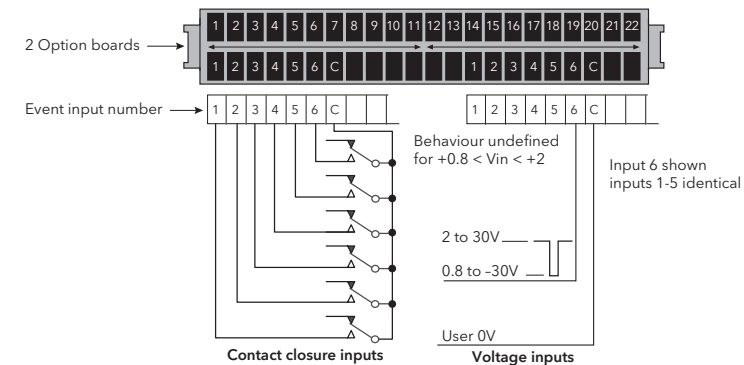


Minimum recommended inter-unit spacing	
Side clamps	Top/bottom clamps
x = 25mm (1 inch) y = 12.5mm (0.5 inch)	x = 12.5mm (0.5 inch) y = 25mm (1 inch)

Panel Cutout Details
 281mm x 281mm (+1 - 0)



EVENT INPUT WIRING



RECORDER LABELLING

One or more of the symbols below may appear on the recorder labelling.

	Refer to the Manual for instructions		Risk of electrical shock
	Protection Earth		Precautions against static electrical discharge should be taken when handling this unit
	This recorder for ac supply only		Ethernet connector
	This recorder for either ac or dc supply only		USB connector
			Serial communications connector