

RO-TB/JB/TJ TERMINAL AND JUNCTION BOXES



Description

Terminal boxes are used for projects that require the integration of cables from multiple instruments into one convenient location.

A terminal box consists of a fibreglass or diecast aluminium enclosure with a variety of size and switching options.

Features

- Terminates Vibrating Wire, thermistors and two- or four-wire type instruments
- Standard Junction/Terminal Boxes (switching and non-switching) cater for 12, 24 or 48 instruments
- Small Terminal Box (non-switching) connects up to 5 separate instruments

Benefits

- Ideal solution for terminating multiple cables
- Allows joining of several individual cables into a single multicore cable
- Provides convenient access for readings
- Provides protection from water ingress and corrosion resistance



Comprehensive information about this product and our full range is available at www.itmsoil.com
If you would like to speak with someone directly please call +44 (0)1825 765044 or email sales@itmsoil.com

Operation

There are several options available:

- Switched boxes provide connection for the readout; instruments are accessed one at a time via the selector switch
- Non-switched boxes allow for direct connection to the sensor
- Junction boxes allow multiple cables to be incorporated into a single multicore cable

Small Terminal Box – Non-switching

These small terminal boxes are used to take a reading of between one and five Vibrating Wire instruments (including their integral thermistor) using one of itmsoils VW Readouts. The instrument cable from each individual Vibrating Wire sensor enters the terminal box via a sealing cable gland and is connected to a terminal block. There is a pre-made connection between the terminal block and a circular connector for use with itmsoil readout.

Terminal Box – Switching

Switched terminal box enclosures are made of fibreglass reinforced polyester. The enclosure comes complete with a hinged lid, cable entry glands and internal termination board. They are used to take manual readings of multiple instruments using a single readout connection point and a rotary switch. There is a standard allowance of 12, 24 or 48 instruments.

Junction Boxes – Non-switching

These enclosures are made of fibreglass reinforced polyester. The enclosure comes complete with a hinged lid, cable entry glands and internal termination board. They are used to join or extend cables en route to a terminal box or datalogger; it is common to take multiple cables into one multicore cable. There is a standard allowance of 12, 24 or 48 instruments.

Junction Boxes – Switching

Switched junction boxes allow multiple cables to be integrated into a single multicore cable, as well as offering the option to take manual readings. The manual readings are taken using a single readout connection point and a rotary switch. There is a standard allowance of 12, 24 or 48 instruments.

Applications

Typical applications include:

- Dams
- Cuttings
- Earthwork contracts
- Structural instrumentation
- Landfill sites
- Slope stability



Associated products

For details on:

Catalogue code:

Dataloggers

D1

VWnote

RO-1-VW-NOTE

Cables

CA

View our full product range on www.itmsoil.com

THE TECHNICAL RATING FOR THIS PRODUCT:

BASIC



As the correct installation of any monitoring sensor or system is vital to maximise performance and accuracy, itmsoil makes the following recommendations, for the skill level of the installation contractor.

ADDITIONAL SUPPORT

itmsoil offer installation and monitoring services to support this system. For more information please email : sales@itmsoil.com or call **+44 (0) 1825 765044**

ADVANCED



The installer is trained and experienced in the installation of this type of instrument or systems, and is ideally a specialist Instrumentation and Monitoring contractor.

INTERMEDIATE



The installer already has previous experience and/or training in the installation of this instrument or system.

BASIC



As a minimum the installer has read and fully comprehends the manual, and if possible has observed these instruments or systems being installed by others.

Specifications

Small Terminal Box – Non-switching

Number of instruments	1 - 2		3 - 5	
Instrument with thermistor			Yes	
Length	160mm		220mm	
Width			100mm	
Height			81mm	
Instrument cable range			5mm - 13.5mm	
Operating temperature			-20 to +80°C	

Terminal Box – Switching, Junction Box and Terminal/Junction Box – Switching

Number of instruments	12		24		48
Instrument with thermistor	No	Yes	No	Yes	No
Length	360mm	540mm	540mm	720mm	720mm
Width	270mm		270mm	360mm	360mm
Height	180mm		180mm	230mm	230mm
Instrument cable range			5mm - 13.5mm		
Multicore cable glands (Junction box)	1	1	1	2	2
Multicore cable range			12mm - 18mm		
Operating temperature			-20 to +80°C		

Ordering Information

Small Terminal Box – Non-switching

For termination of VW instruments with or without thermistors in a IP66 , robust, diecast aluminium enclosure.
Connects to logger or readout RO-1-VW with Terminal Box flylead. Accepts cable sizes 5mm–13.5mm diameter

RO-TB-1	160mm x 100mm x 81mm; for 1No. VW instrument with thermistor
RO-TB-2	160mm x 100mm x 81mm; for 2No. VW instruments with thermistors
RO-TB-3	220mm x 100mm x 81mm; for 3No. VW instruments with thermistors
RO-TB-4	220mm x 100mm x 81mm; for 4No. VW instruments with thermistors
RO-TB-5	220mm x 100mm x 81mm; for 5No. VW instruments with thermistors

Terminal Box – Switching

For termination of VW instruments in a IP65, fibreglass reinforced polyester enclosure.
Connects to logger or readout RO-1-VW with Terminal Box flylead

RO-TB-S-12	360mm x 270mm x 180mm; for 12No. VW instruments
RO-TB-S-12-T	540mm x 270mm x 180mm; for 12No. VW instruments with thermistors
RO-TB-S-24	540mm x 270mm x 180mm; for 24No. VW instruments
RO-TB-S-24-T	720mm x 360mm x 230mm; for 24No. VW instruments with thermistors
RO-TB-S-48	720mm x 360mm x 230mm; for 48No. VW instruments

Junction Box – Non-switching

For connection of VW instruments to multicore cable CA-2.3 to datalogger, in a IP65, fibreglass reinforced polyester enclosure

RO-JB-12	360mm x 270mm x 180mm; for 12No. VW instruments
RO-JB-12-T	540mm x 270mm x 180mm; for 12No. VW instruments with thermistors
RO-JB-24	540mm x 270mm x 180mm; for 24No. VW instruments
RO-JB-24-T	720mm x 360mm x 230mm; for 24No. VW instruments with thermistors
RO-JB-48	720mm x 360mm x 230mm; for 48No. VW instruments

Terminal/Junction Box – Switching

For connection of VW instruments to multicore cable CA-2.3 to datalogger, in a IP65, fibreglass reinforced polyester enclosure.
Also connection for logger or readout RO-1-VW with Terminal Box flyleads

RO-TJ-S-12	360mm x 270mm x 180mm; for 12No. VW instruments
RO-TJ-S-12-T	540mm x 270mm x 180mm; for 12No. VW instruments with thermistors
RO-TJ-S-24	540mm x 270mm x 180mm; for 24No. VW instruments
RO-TJ-S-24-T	720mm x 360mm x 230mm; for 24No. VW instruments with thermistors
RO-TJ-S-48	720mm x 360mm x 230mm; for 48No. VW instruments

Multicore Cable

CA-2.3-12-SC	12 core, multicore cable, 16/0.20, screened; priced per metre, PVC jacket
CA-2.3-25-SC	25 core, multicore cable, 16/0.20, screened; priced per metre, PVC jacket
CA-2.3-50-SC	50 core, multicore cable, 16/0.20, screened; priced per metre, PVC jacket

soil
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