



VW0420 Vibrating Wire Isolated Analog Interface

The VW0420 provides an interface between vibrating wire instruments and factory automation systems which support 4-20 mA sensors. The vibrating wire section measures the natural frequency and temperature of the sensor. The measurements are then converted to engineering units, unit converted etc. as required, and scaled to the 4-20 mA outputs.

Setup of the device is straightforward, using a Windows host program connected via USB cable.

Because the source of power, the vibrating wire sensor, and the 4-20 mA measurement may be in different locations, there are 4 dielectrically isolated ground subsystems, one for the power, one for the sensor, and one for each of the outputs. This isolation gives maximum flexibility in connecting the system.



Official RST distributor in Europe & MENA

Geotechnical Centre
Rougham Industrial Estate
Rougham, Bury St Edmunds
Suffolk IP30 9ND
ENGLAND
Telephone: +44(0)1359 271167
Facsimile: +44(0)1359 271168
Geosense is a division of
Marton Geotechnical Services Ltd

info@mgsgeosense.co.uk

www.mgsgeosense.co.uk

ISO 9001:2000
REGISTERED QUALITY SYSTEM





specifications

ITEM	DESCRIPTION
Vibrating wire sensor types	Piezometer, strain gauge, mini-strain gauge, displacement sensor etc.
Sweep types	A,B,C,D,E,F, user-defined
Frequency input	450-6000 hz
Update Rate	2 seconds
Vibrating wire calibration	mX+b, polynomial, units conversion, temperature compensation
Thermistor types	NTC 3000, 2252, 5k, 10k, 2k RTD
Current outputs (2)	Vibrating Wire, Thermistor
Current output	4-20 mA nominal, isolated between channels and with respect to sensor to 2500 VAC
Vibrating wire conversion base	Raw data, engineering units, temperature corrected
Vibrating wire conversion base units	B units, kPa, psi, mH ₂ O, µe, etc
Temperature conversion base	°C, °F, ohms
Current resolution	0.002%
Current conversion accuracy	0.02%
Host program PC connection	USB 2.0, USB mini B connector
Compatible operating systems	Windows 2000, XP, Vista
Operating Temperature	-40 to 55°C
Power Supply	9-24 VDC, 8-35 mA, isolated to 1000 VAC
Dimensions	3.55 x 3.62 x 0.89 in. (90 x 92x 22.5 mm)

