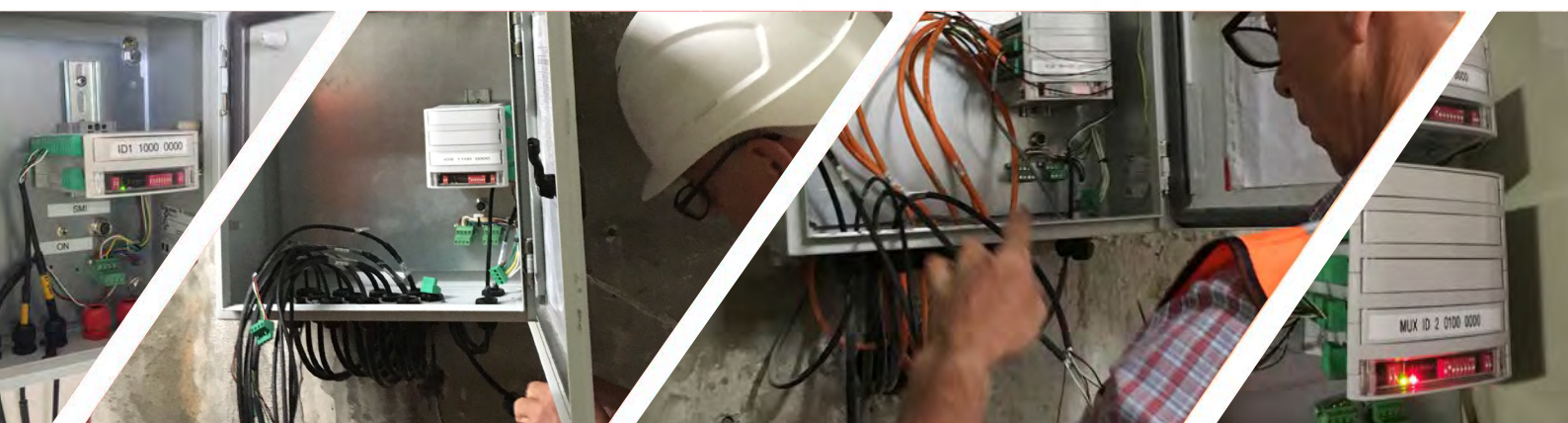# Multiplexer System SmartMux

A modular multiplexer that allows the management of multiple sensors as part of a remote or automatic data acquisition system. It is an easy-to-use digital alternative to the traditional vibrating wire rotary switch terminal box

Multiplexer System SmartMux

Overview

The Geosense SmartMux is a modular multiplexer that allows the management of multiple sensors as part of a remote or automatic data acquisition system. It is an easy-to-use digital alternative to the traditional vibrating wire rotary switch terminal box.

Sensor connection is simple thanks to plug-in connectors. Sensor channels can be easily viewed and selected via the SmartMux Interface which replaces time-consuming rotary switches and readout.

Available either as an analogue or digital version it is capable of being used with a wide range of sensor outputs including VW, V, mV/V, 4-20mA, Pt100, NTC and RS485. Models are available as 4, 8, 12, and 16 channel and can be configured either as 2 pole (2 wires) or 4 pole (4/3 wires) or any combination of each. Example: 16 channel can have 32 x VW or 16 x VW + Temp or any combination.

APPLICATIONS

Allows multiple sensor types to be connected in a central location and is used typically for:

Dams

Tunnels

Roads

Deep foundations

FEATURES

Manual readings available

Can be integrated into automatic systems

Intelligent on-board A2D processing

Vibrating wire inputs

Analogue inputs

Digital inputs & outputs

Can be connected together

CE

Multiplexer System SmartMux

Specifications

MULTIPLEXER

Channel numbers	4+4, 8+8, 16+16 (or any combination)
Total multiplexers that can be linked	Up to 256
Total channels	32 for MUX, max 16320 channels
Inputs	VW, V, mV/V, 4-20mA, Pt100, NTC, RS-485
Resolution	24 Bit V, mV/V, 4-20mA, Pt100, NTC 0.1Hz
Supply voltage	+20V, +12V, ± 12V, +5V
Communication	RS-485, Dust network
Operating temperature	-20 to + 70ºC
Protection	IP66
Dimensions L x W x H	120 x 115 x 25 cm
Weight	280g

SMART MUX INTERFACE

Inputs	VW, V, mV/V, 4-20mA, Pt100, NTC, RS-485
Resolution	24 Bit V, mV/V, 4-20mA, Pt100, NTC 0.1Hz
Display	LCD
Supply voltage	+20V, +12V, ± 12V, +5V
Communication	RS-485
Operating temperature	-20 to + 70ºC
Protection	IP66
Dimensions L X W X H	340 x 300 x 150 cm
Weight	2.5Kg

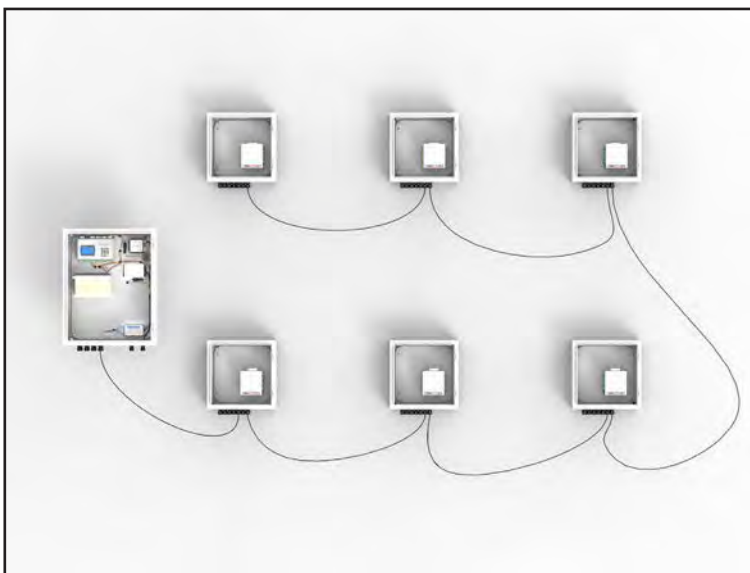# Multiplexer System SmartMux

Models

REMOTE SMARTMUX

Comprises of a SmartMux housed in a waterproof cabinet which can be placed in any position on site and have multiple sensors attached. They can be linked together by a single 4 core cable which can then be connected to a central GeoLogger G8-Plus. Cable lengths up to 1000 metres can be realised even for 4-20mA signals.
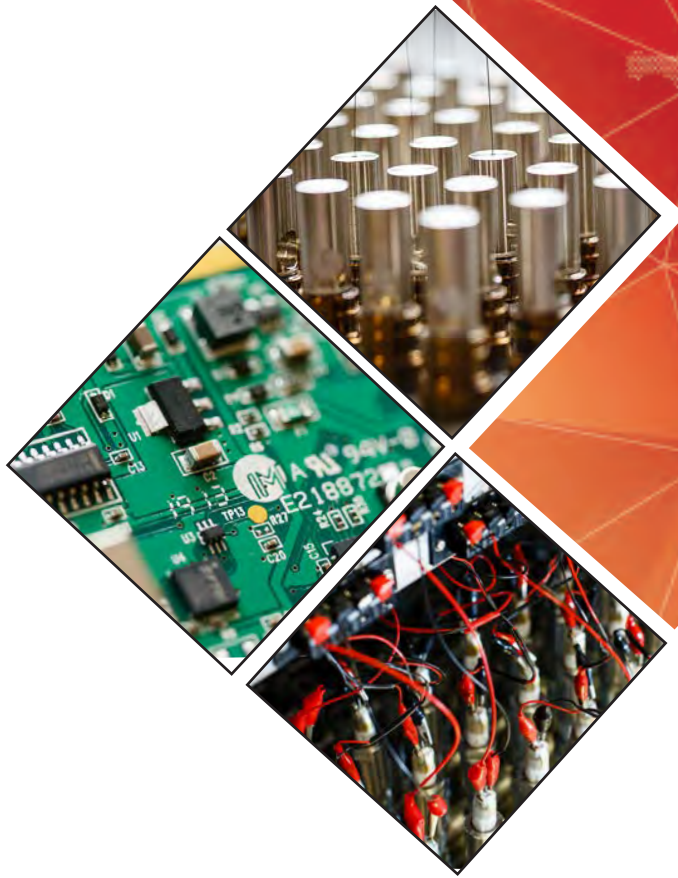

REMOTE SMARTMUX-PLUS

By connecting a SmartMux Interface (SMI) local data acquisition can be obtained and stored onto the interface module

SMARTMUX NETWORK

Diagram shows a SmartMux Network with six modules connected into a GeoLogger G8-Plus

GE SENSE

V1.1 09/2017