DATA SHEET

CONTROLS

Data acquisition unit, GEODATALOG 8

GEODATALOG 8

MAIN FEATURES

- Up to 8 independent input channels.
- Network configuration of up to 64 independent channels.
- LAN / Ethernet connection to PC via dedicated software.
- Compatible with load cells, pressure transducers, strain gauges, LDT/LVDT/potentiometric displacement transducers.
- Effective resolution: 131,000 points.
- Sampling rate up to 500 readings per second per channel.
- Numerical and graphical display of readings via PC software.
- The transducers can be grouped and combined by the user for matching different applications.
- It is possible to perform various tests (e.g. shear, consolidation, triaxial, …) in parallel, each one having independent clock, channels and logging mode

GENERAL DESCRIPTION

GEODATALOG 8 is a multipurpose data logger which works directly connected to a PC. Data are automatically transferred to the PC in real time for live monitoring of the tests progress.
GEODATALOG 8 records and monitors in real time the measurements requested for soil mechanics testing, as: consolidation, shear, triaxial, permability and many others.
It is compatible with strain gauge load cells, pressure transducers, linear LDT transducers, LVDT conditioned transducers, potentiometric displacement transducers (see link to related products).
GEODATALOG 8 is conceived with a modular and flexible concept: up to 8 instruments can form a network (using a hub model 26-WF4645) and then create a modular system with up to 64 independent channels.
The data acquisition unit is supplied complete with general purpose DATACOMM 2 PC software allowing remote calibration of the channels and fully comprehensive data management.
DATACOMM 2 software combines the active channels into customizable groups by the operator. Data acquisition for each group is an independent task which can be started/stopped automatically with specific acquisition and logging mode.
ASCII format data export is available for combination with our geotechnical Geo-Analysis-Templates suitable for post-processing and printout of test certificates according to the most important international Standards.

TECHNICAL SPECIFICATIONS

- Requires connected PC
- Number of channels: 8
- Network mode: Up to 8 units
- Sampling rate: Up to 500 readings/second per channels
- Real resolution:131,000 points
- Communication port: LAN / Ethernet
- Excitation (V_{EXC}): from 1 V to 10 V for each couple of channels (up to 4)
- Datalogger input: 0-10 V; 0-20 mA
- Software: DATACOMM 2 (included)
- Dimensions approx lxdxh [mm]:290x195x61
- Weight approx [kg]: 1.6 kg
- Power supply: 110-220V,50-60 Hz, 1ph

DATA SHEET

ORDERING INFO

30-WF6008

GEODATALOG 8, 8 channels multipurpose data logger with dedicated software DATACOMM 2:

- 8 independent analogue input channels
- Up to 8 instruments can work in a network creating a modular system with up to 64 independent channels.
- programmable V_{EXC} via software from 1 to 10 V for each couple of channels (up to 4).
- Compatible with load cells, pressure transducers, strain gauges, LDT / LVDT / potentiometric type displacement transducers and any type of conditioned transducer having output signal 0-10 VDC or 0 20 mA.
- Effective resolution: 131'000 divisions.
- Numerical and graphical display of readings.
- LAN / Ethernet connection to PC.
- Supplied with general porpose PC software allowing remote calibration of the channels, and fully comprehensive data managment.
- Data exporting with ASCII format.
- PC and cables not included.
- 110-230V / 50-60Hz / 1 Ph.

ACCESSORIES

Cables (mandatory)
82-P9008/ELT
Kit of four cables for connect load cells, pressure transducers, strain gauges, LDT / LVDT / potentiometric type displacement transducers to DATALOG 8 and GEODATALOG 8

Lan Hub
26-WF4645
LAN hub with 8 ports for Wykeham Ferrance devices

Extension Cable
30-WF6042
Transducer extension cable, 6 m
30-WF6044
Transducer extension cable, 12 m

DATA SHEET

Data processing: Geo Analysis Templates

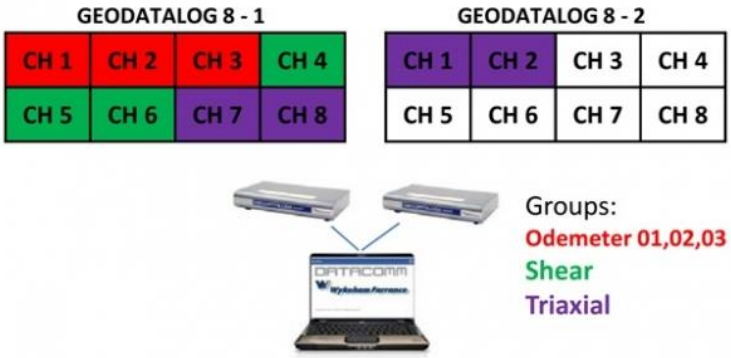
Sixteen templates for different tests and Standards have been developed specifically for processing test data recorded by the DATACOMM 2 software. The templates are MS Excel® based programs with easy-to-use functions for importing data files, calculating results, producing test reports that conforms to the relevant international Standards

Test		Standard	Ordering information
Consolidation	Incremental loading	BS 1377:5	30-WF6016/T1
		ASTM D2435	30-WF6016/T8
	CRS	ASTM D4186	30-WF6016/T6
	Hydraulic consolidation	BS 1377:6	30-WF6016/T12
	SWCC -Hydraulic consolidation	-	30-WF6016/T13
Shear	Direct/residual	BS 1377:7	30-WF6016/T2
		ASTM D3080	30-WF6016/T9
	Ring	BS 1377:7	30-WF6016/T3
		ASTM D6467	30-WF6016/T16
Triaxial	Effective stress	BS 1377:8	30-WF6016/T4
		ASTM D4767 / D7181	30-WF6016/T11
	Total stress	BS 1377:7	30-WF6016/T5
		ASTM D2850	30-WF6016/T10
Other tests	Permeability	BS 1377:6	30-WF6016/T14
	CBR	BS 1377:4	30-WF6016/T7
		ASTM D1883	30-WF6016/T17
	Unconfined	ASTM D2166	30-WF6016/T15

DATA SHEET

Geotechnical data acquisition unit – GEODATALOG8

Modular system with up to 64 independent channels



Schematic layout of possible network sharing channels between two GEODATALOG8