



# nanoDaq-SL

## Sub-Miniature Pressure Scanner Acquisition System

- **32 channel sub-miniature pressure scanner module with engineering unit output.**
- **Measures output from 2 x 16MS direct mount MicroScanners**
- **Enables scanners to be mounted in remote locations on measurement surface.**
- **Up to 4Khz per channel measurement frequency.**
- **Output over Ethernet (100Mbit TCP / UDP) and CAN.**
- **Complete with IEEE 1588 PTP V2.**
- **Embedded web server for configuration and calibration.**
- **Wide thermal operating range (-20 to 90° C)**



The nanoDaq-SL is another development from Chell Instruments that enables the use of pressure scanners in remote and thin-section locations. The nanoDaq-SL is a development of the nanoDaq product but, instead of the scanners being located directly on the unit, they are remotely connected via cables.

The nanoDaq-SL can be connected to one or two TE MicroScanners which provide unrivalled pressure scanning performance and a reduced package size.



The nanoDaq acquires data from the two scanners in parallel enabling measurements at speeds up to 4Khz per channel. This can be output directly or internally averaged.

Fully calibrated and temperature compensated data is output via Ethernet or CAN in engineering units direct to a PC or on-vehicle acquisition unit.

The acquisition parameters can be configured on the nanoDaq by using its embedded web server which gives intuitive and complete control over the nanoDaq.

nanoDaq-SL Specifications	
Compatible scanners	TE Direct mount scanner, 5 volt calibration. Part number 16MS-0X02021X
High speed data output.	CAN and Ethernet (TCP/IP and UDP)
System accuracy (DTC scanner range $\geq$ 5 PSI)	+/- 0.05% FS (plus +/- 0.2mbar for absolute mode)
System accuracy (DTC scanner 10" water $\leq$ range $\geq$ 5 PSI)	+/- 0.1% FS (plus +/- 0.2mbar for absolute mode)
System accuracy (DTC scanner range < 10" water)	+/- 0.15% FS (plus +/- 0.2mbar for absolute mode)
Dimensions (width x depth x height in mm excluding connectors.)	46.6 x 32.8 x 9.2
Weight (with DTC scanner)	21 grams
Maximum acquisition Speed (measurements / channel / second).	4000
Input supply	8 to 30 VDC at 3VA
Pressure connection	Direct to scanner or through optional gasket (TE part number 24-28-16110)
Mating electrical connector (scanner)	Omnetics A28000-15
Mating electrical connector (interface)	Omnetics A29000-009
Scanner cable part number	nanoDaq-SL-SC (maximum 1000mm)
Interface cable part number	nanoDaq-SL-Cab1 (450mm length)
System resolution	16 Bit
System timing	IEEE1588 PTP V2 and Hardware trigger (5v TTL)
Operating temperature range.	-20 to+90°C
Maximum relative humidity	95% at 50°C (non-condensing)
Ethernet specification	Auto-negotiating 100Mbit TCP/IP or UDP (user configurable)
CAN specification	2.0 B

## nanoDaq-SL Dimensions



Chell Instruments Ltd  
Folgate House  
Folgate Road  
North Walsham  
Norfolk NR28 0AJ  
England



ISO 9001:2015  
BSI membership number 41103115

Tel.: +44 (0)1692 500555  
Fax: +44 (0)1692 500088

E-mail : sales@chell.co.uk



0687