

## 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.

anoDAQ-SI

- 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.

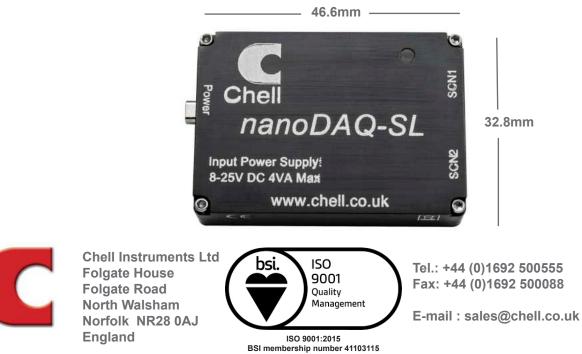
> The nanoDaq acquires data from the two scanners in parallel enabling measurements at speeds up to 4Khz per channel. This can be output directly or internally averaged.

> > 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 ≥ 5 PSI)	+/- 0.05% FS (plus +/- 0.2mbar for absolute mode)
System accuracy (DTC scanner 10" water ≤ range ≥ 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





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