MicroDaq 2 Pressure Scanner

Enhanced Miniature Smart Pressure Scanner

- *Intelligent pressure scanner module with engineering unit output.*

- *Compatible with all TE/PSI 32 and 64 channel Pressure Scanners.*

- *Up to 0.05% FS accuracy output.*

- *Complete with IEEE 1588 PTPV2 time stamping*

- *Up to 2Khz per channel measurement frequency.*

- *Output over Ethernet (100Mbit TCP / UDP) and CAN.*

- *Rugged enclosure for on-vehicle applications.*

- *Fully configurable over Ethernet with embedded web server.*

The MicroDaq 2 is a further development of the well established MicroDaq system. The MicroDaq 2 is available alongside the existing MicroDaq and continues to provide an ultra-miniature complete pressure scanning unit that outputs engineering unit data over Ethernet and CAN.

The MicroDaq 2 features a new processor which has a hardware implementation of the IEEE 15888 PTPV2 precision time stamping protocol.

The new MicroDaq also has an embedded web server for all setup functions so the serial setup program is no longer required. This also means that there is now no external USB connector on the MicroDaq 2.

The MicroDaq 2 remains fully compatible in run mode with the MicroDaq so it will run on existing code without any changes.

The MicroDaq 2 contains a PSI ESP™ pressure scanner with which it interfaces, providing the user with a straight-forward digital interface. Where available, the MicroDaq takes full advantage of the DTC technology within the scanners.

The DTC scanners contain all their coefficients in an EEPROM and the temperature of every transducer is measured to calculate the compensation. The DTC scanners also contain a 3X deranging option and shuttle valve position sense and all these functions can be accessed by the supplied software.

The MicroDaq 2 may also be used with conventional scanners and provides the user with a scanner temperature measurement so that thermal mapping of the scanner can be carried out using the supplied software.

The MicroDaq 2 can scan at the maximum speed of the new Gen2 scanners (70KHz) enabling it to produce data at more than 4KHz per channel.
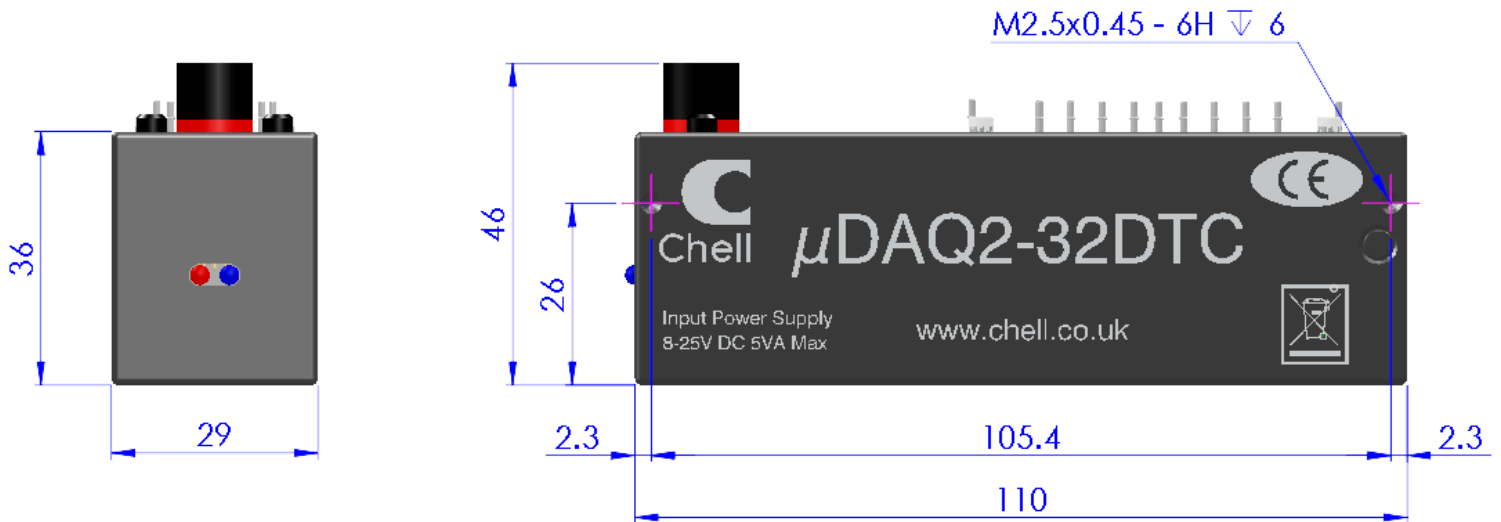
The data is available over Ethernet which is auto-negotiating 10 / 100Mbit. The Ethernet can be configured as TCP or UDP and when in UDP it can auto-identify over the network.

The MicroDaq is packaged to enable it to withstand the harsh environments of on-car testing. It also affords the scanner some protection by enclosing all of it bar the top plate.
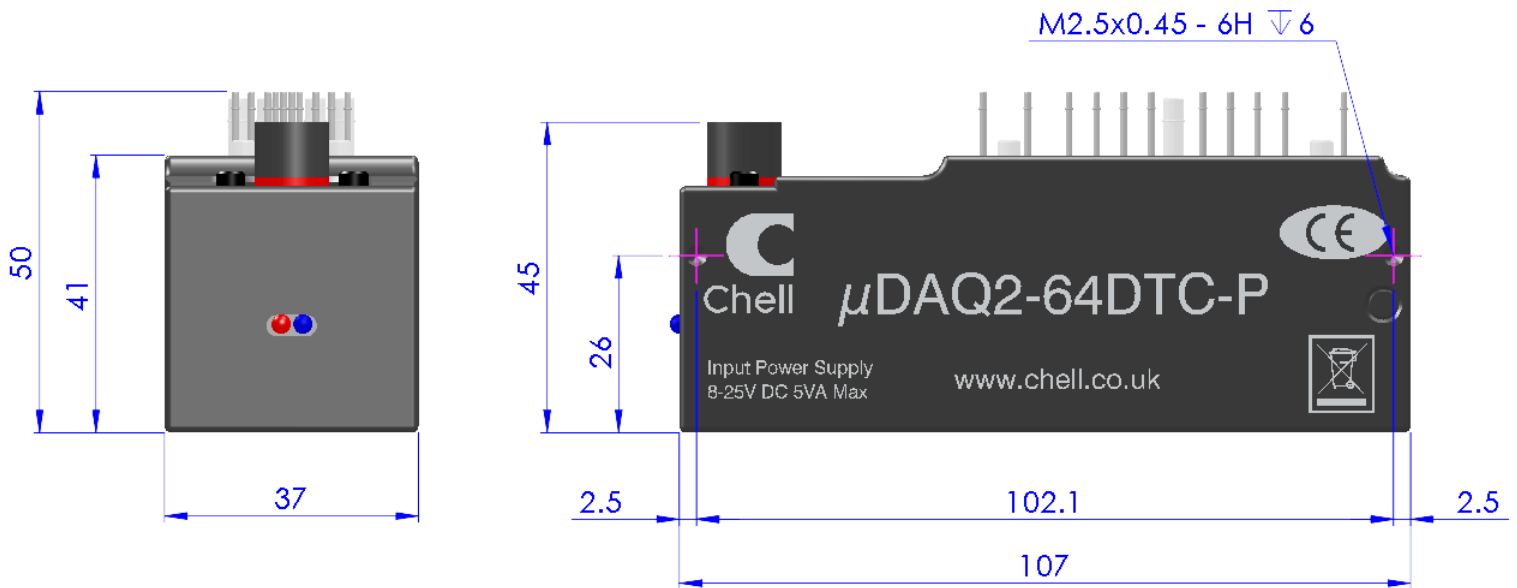
MicroDaq Specifications		
	MicroDaq 32	MicroDaq 64
High speed data output.	CAN and Ethernet (TCP/IP and UDP)	CAN and Ethernet (TCP/IP and UDP)
System accuracy (DTC scanner range ≥ 5 PSI)	+/- 0.05% FS	+/- 0.05% FS
System accuracy (DTC scanner 10" water ≤ range ≥ 5 PSI)	+/- 0.1% FS	+/- 0.1% FS
System accuracy (DTC scanner range < 10" water)	+/- 0.15% FS	+/- 0.15% FS
System accuracy (standard scanner range ≥ 5 PSI)	+/- 0.25% FS	+/- 0.25% FS
System accuracy (standard scanner range ≤ 5 PSI)	+/- 0.25% FS	+/- 0.25% FS
Dimensions (width x depth x height in mm)	110 x 29 x 46	107 x 37 x 45
Weight (with DTC scanner)	207g	278g
Weight (with conventional scanner)	201g	275g
Weight (without scanner)	95g	135g
Maximum acquisition Speed (measurements / channel / second).	1000	500
Input supply	8-25 VDC at 3 VA	8-25 VDC at 4VA
Consumption at 24 VDC	200mA	350mA
System resolution	16 Bit	
Operating temperature range	+5 to+90°C	
Storage 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	
Mating connector	ASDD606-09SN-HE	

Ordering Codes		
Options		
	32	64
No Scanner	MicroDaq2-32-NS	MicroDaq2-64-NS
Conventional Scanner	MicroDaq2-32-C	MicroDaq2-64-C
DTC Scanner	MicroDaq2-32-DTC	MicroDaq2-64-DTC
Purge option suffix (required for 64 channel scanner only)		Add -P

M2.5x0.45 - 6H ⬇ 6

μDAQ2-32DTC

Input Power Supply
8-25V DC 5VA Max

www.chell.co.uk

36

29

46

26

2.3

105.4

2.3

110

MicroDaq2-64 - (standard and purge variants)

M2.5x0.45 - 6H ⬇ 6

μDAQ2-64DTC-P

Input Power Supply
8-25V DC 5VA Max

www.chell.co.uk

50

41

37

45

26

2.5

102.1

2.5

107

Note: Dimensions vary according to the scanner options, please contact us for further details. Solid models are available at http://www.chell.co.uk/product_details/turbo-machinery/microdaq

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