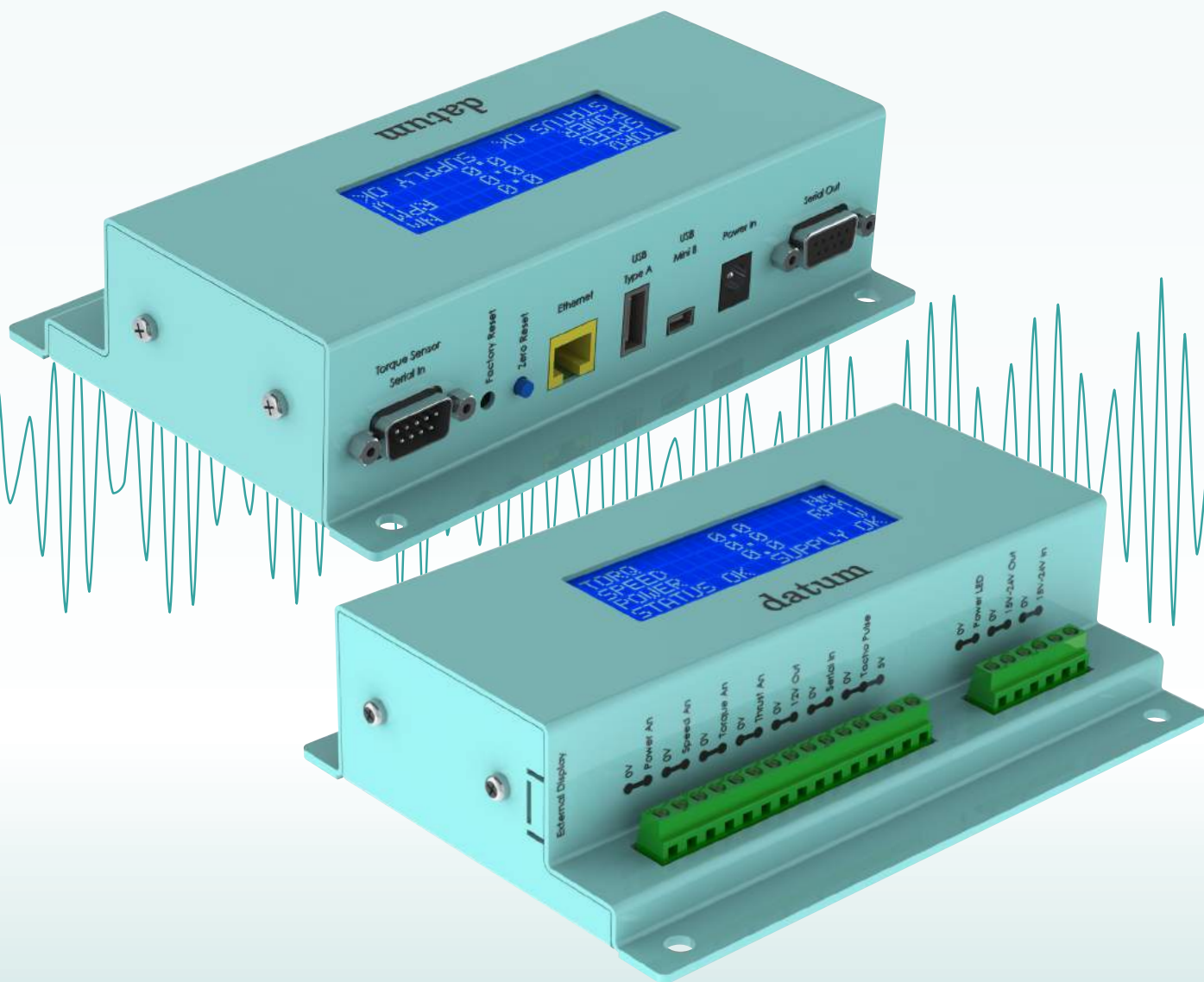


DATUM ELECTRONICS

UNIVERSAL TRANSDUCER INTERFACE

PRODUCT OVERVIEW



THE DATUM UNIVERSAL TRANSDUCER INTERFACE

The Datum Universal Transducer Interface has been designed to accept signal from all of the Datum Electronics range of Rotary and Static Torque Sensors.

The sensor ranges supported include:

M425 Rotary Torque Transducers

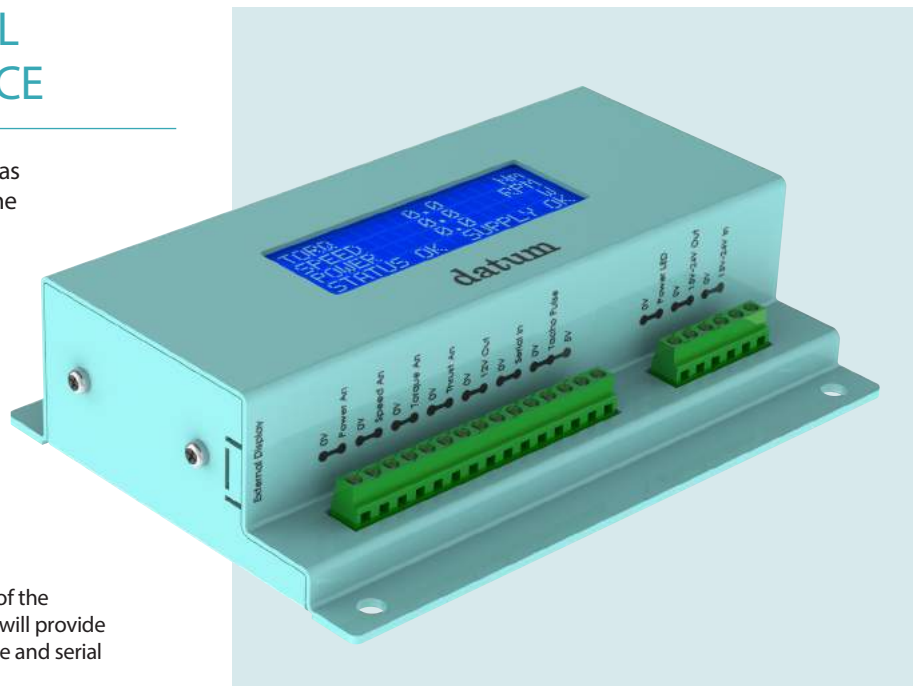
RS/FF425 Rotary Torque Transducers

Commercial Marine and Heavy Industrial Torsionmeter Systems

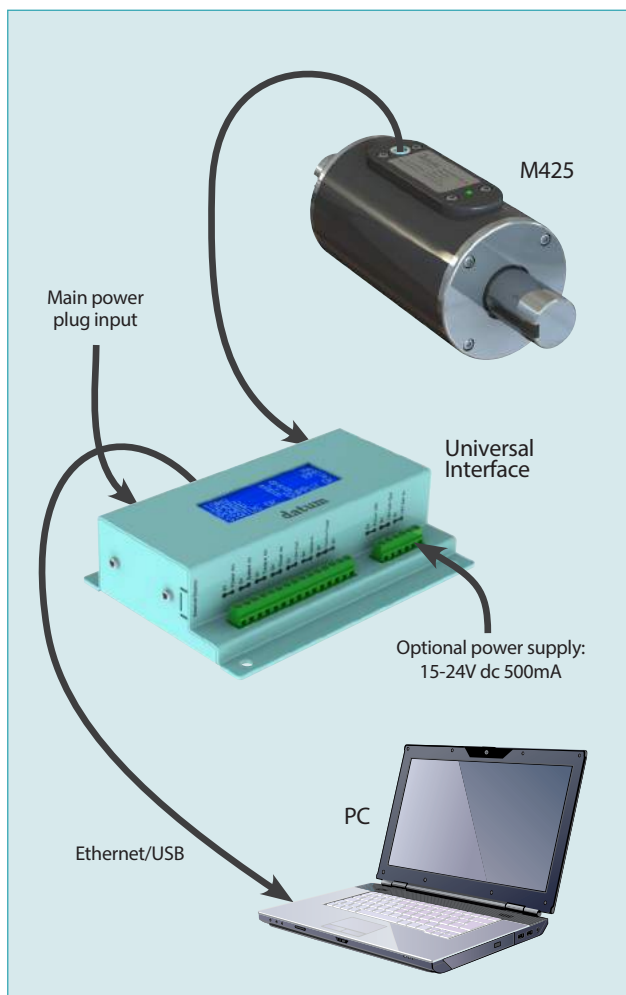
NTM Naval Marine Torsionmeter Systems

RS/FF410 Static Torque Transducers

The interface will accept the serial data from any of the above and most of the earlier Datum products. It will provide a display of the data and a wide range of analogue and serial data outputs.



Typical Configuration



Outputs Provided

Output power - for the M425, RS/FF425, RS/FF410 and the Commercial Marine System

Ethernet - data output

Mini USB Type B - data output and configuration interface

USB Type A - logging to memory stick

RS485/RS232 Serial - data output

4 channels of analogue - user configurable to 4-20mA 4-12mA, +/-5Vdc, +/-10Vdc, 0-5Vdc and 0-10Vdc

The data used for these outputs can be user selected from the Torque, RPM and Power data plus an additional strain input (often used for shaft bending or thrust).

Additional Input

The Datum Universal Transducer Interface will also accept an input from an external shaft speed tacho.

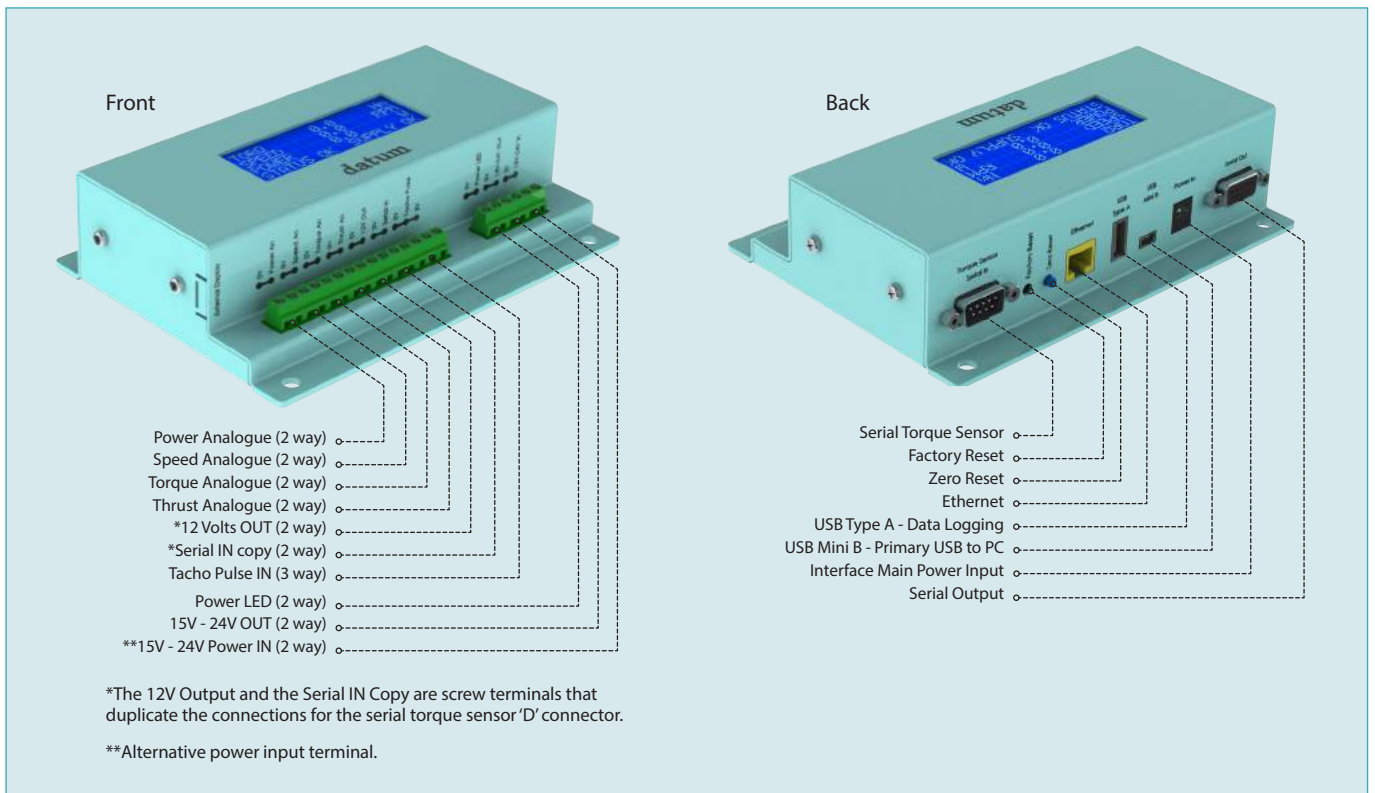
Power Supply 15-24Vdc.

Interface Display

The Universal Interface display can show the following data from the Datum Electronics range of Torque Transducers:

```
TORQ      0.0      Nm
SPEED     0.0      RPM
POWER     0.0      W
STATUS OK  SUPPLY OK
```

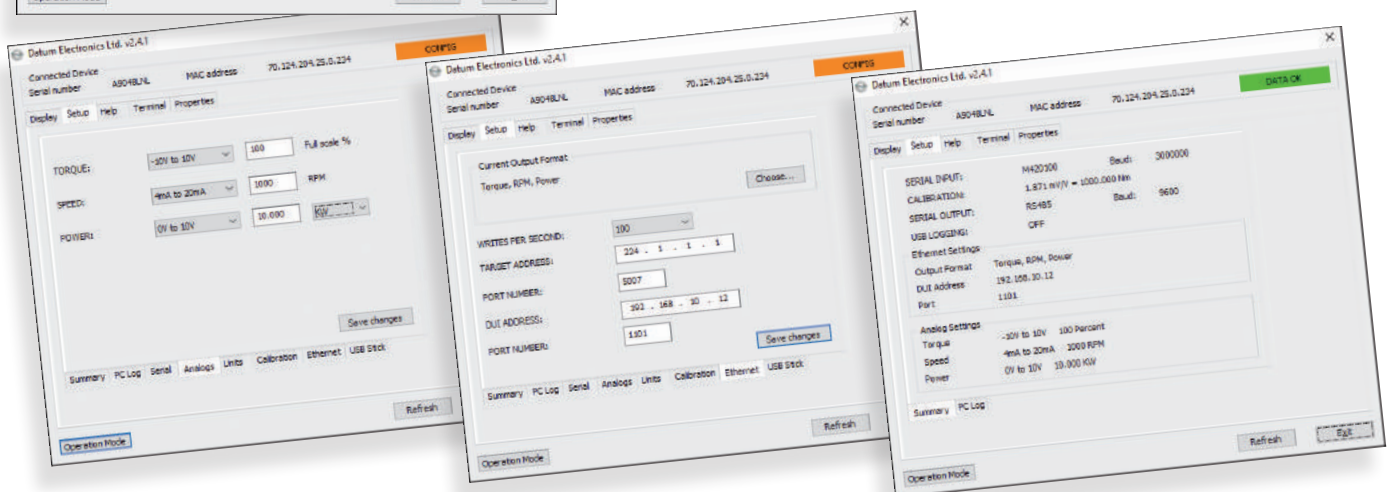
Datum Universal Interface Connections Guide



Graphic User Interface

Datum data logging software

The Datum data logging and configuration software provides a wide range of control functions for the range of Datum Electronics torque transducers including set-up and configuration options plus data logging.



Datum Universal Interface Specifications

SIGNAL INTERFACE OUTPUTS

Digital:	
RS485	Serial data
RS232	Serial data
Ethernet	Data
MODBUS UDP	Serial data
USB Type Mini B	Serial data and configuration
USB Type A	Data logging

Analogue:

All four of the M425 Transducer's analogue output channels can be configured for any of the following settings by the user:
 4-20mA configured 4-20mA (4-12-20mA):
 +/-10Vdc, +/-5Vdc, 0-10Vdc or 0-5Vdc

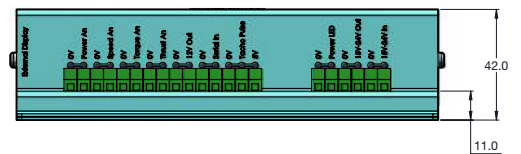
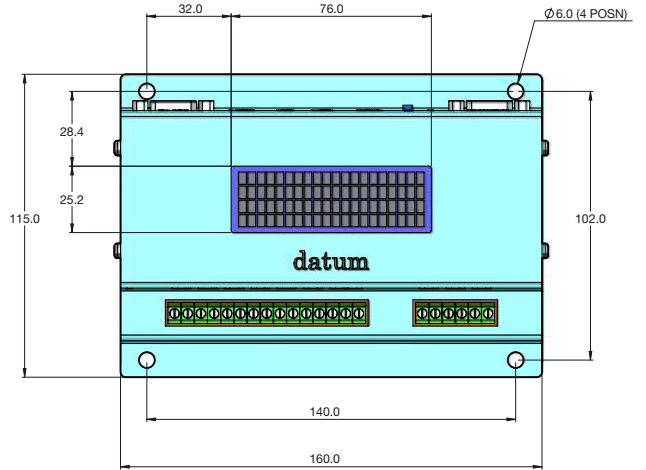
A typical configuration arrangement would be as follows:

Channel 1 - Torque	from 0-500Nm as 4-20mA
Channel 2 - Speed RPM	from 0-100-rpm as 0-5Vdc
Channel 3 - Power	from 0-5000W as 4-20mA
Channel 4 - Spare	

Display:			
Torque	Speed RPM	Power	Status

ENVIRONMENT

Normal Specification Range	10 to 60°C
Operating Range	-10 to +70°C
Storage Range	-35 to +75°C
Environmental Protection	IP54
Electromagnetic Compatibility	EN61326-1:2006 (IEC61000-4), IEC60945)



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