

DIGITAL/ANALOG LOAD CELL TRANSMITTER



Digital / Analog Load Cell Transmitter Series based on last generation of A/D converters and microprocessors, obtaining a modern, compact and reliable design. Its fully configuration and calibration by front panel keyboard avoids adjustment with potentiometers, reducing the difficulty of start-up, calibration and maintenance. It's ideal for industrial installations with load cells.

- Configuration and calibration by computer interface or via front panel keyboard.
- High resolution.
- Display 6 digit 14mm LED.
- 2 optically-isolated logic Inputs.
- 2 optically-isolated logic Outputs.
- Selectable Digital filtering.
- Auto zero and zero-tracking functions.
- 10 point linearity compensation.
- Peak Hold function for dynamic measurement.
- Analog outputs: 0-5V DC, 0-10V DC, 0/20mA and 4/20mA selectable over the entire measuring range.
- Serial Outputs: RS-232, RS-422 or RS-485 with MODBUS RTU protocol. Option: PROFIBUS or DEVICENET (replace analog output).
- Up to 32 addressable units can be connected point to point by using the RS-485 serial output.
- Protection RFI / EMI
- Enclosure: ABS plastic.

■ **VERSIONS:**

DIN rail mount:

- 89076 DAT400**
- 89076P DAT400 PROFIBUS**
- 89076D DAT400 DEVICENET**

Panel mount:

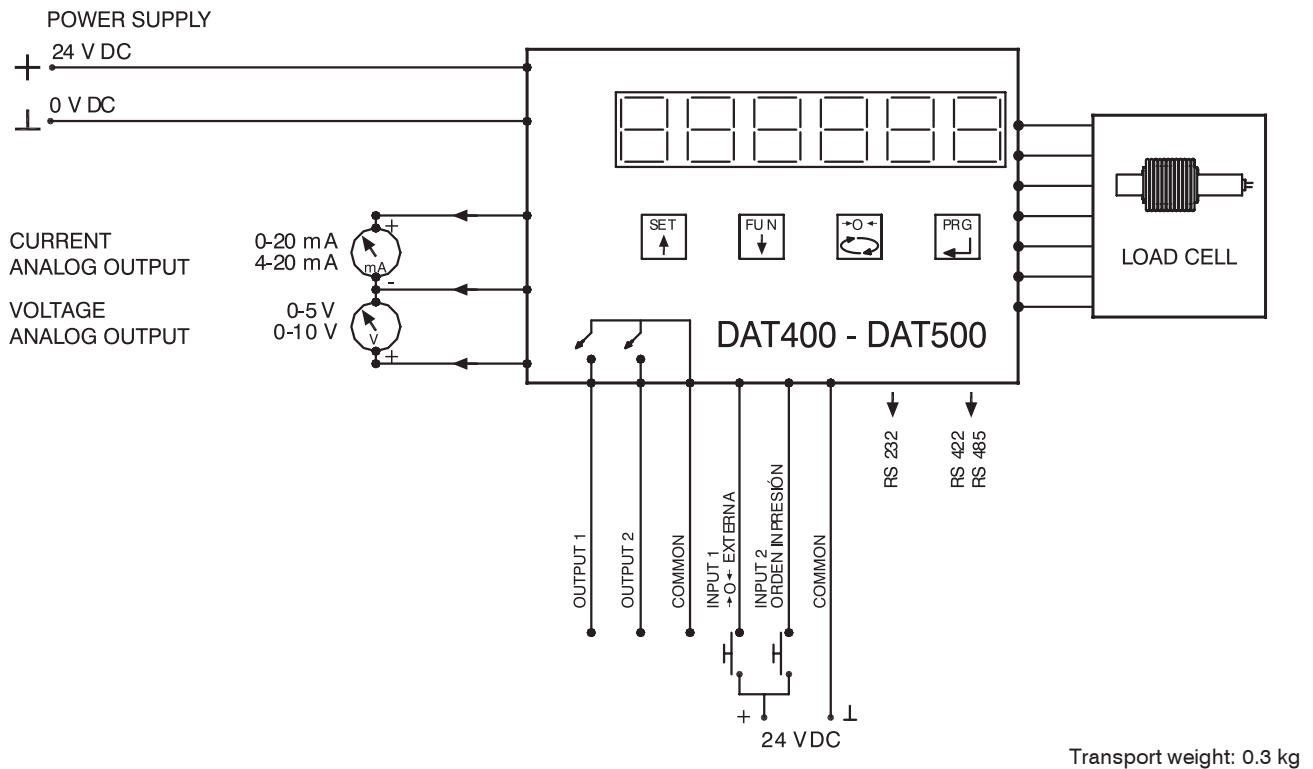
- 89079 DAT500**
- 89079P DAT500 PROFIBUS**
- 89079D DAT500 DEVICENET**

■ **ACCESORY:**

89077 Mod. 121 Power supply 230V AC to 24V DC, DIN Rail mount.



DAT400 - DAT500



TECHNICAL SPECIFICATIONS

Power requirements:

Input voltage 24V DC \pm 15%
Power consumption 7,5 W
Isolation Class II
Category Category II

Environmental:

Operating Temperature -10 to +40 °C (+14 to +104 °F)
Storage Temperature -20 to +50 °C (-4 to +122 °F)
Relative Humidity 85% non-condensing

Display:

Type 6-digit red LED,
7 segment of 14 mm (0,55") high
Status LED's 4 Red LED's
Keyboard 4 Keys (tactile feedback)

Analog Output (Isolated):

Type 16 bit D/A conversion
Voltage 0-5 and 0-10 V DC (10 K Ω min load)
Current 0-20 and 4-20 mA (300 Ω max load)
Linearity < 0,012% of full scale
Temperature Creep < 0,001 % of FS / °C

Inputs & Outputs:

2 Logic Inputs Opto-isolated, 24V DC PNP
(requires ext. power supply)
2 Logic Outputs Solid-state Opto-relays,
(maximum load 24 V DC/100 mA each)
Serial Output RS-232, RS-422 or RS-485
Max. Cable Length . 15m RS-232, 1000m RS-422 and RS-485
Standard Protocols ASCII, MODBUS RTU according
PI-Mbus-300* MODICON guide
Baud Rate ... 2400, 9600, 19200, 38400 or 115200 selectable

Performance:

Excitation Voltage 5 V DC, short circuit proof
Load Current 85 mA (six 350 Ω load cells)
Conversion Rate 50 updates/second (no filtering)
Resolution 60.000 counts
Sensitivity 0,2 μ V / count
Linearity < 0,01 % of full scale
Temperature Creep < 0,001% of FS / °C
A/D Converter 24 bits
Signal Input Range -0,5mV/V to +3,5 mV/V
Filter 0,1 Hz to 25 Hz selectable
Increment Size x1, x2, x5, x10, x20, x50
Decimal Point 0.0, 0.00, 0.000
Calibration Methods Computer interface or via front panel

Enclosure:

	DAT400	DAT500
Overall Dimensions	106 x 90 x 58 mm (LxHxD)	96 x 48 x 139 mm (LxHxD)
Mounting	DIN Rail	Panel
Enclosure	ABS	ABS
Protection (front)	IP20	IP20
Wiring Connections	Terminal blocks (pitch = 5mm)	Terminal blocks (pitch=5mm)
Panel drill		92 x44 mm

*DAT transmitter are configured according PI-Mbus-300 Modicon guide
(owner of Modbus technology)