

TX13 Analogue Load Cell Transmitter

High speed and precise analogue output



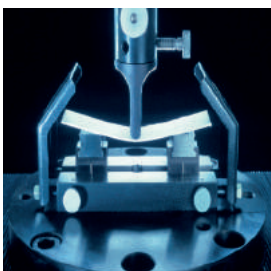
Fast and Accurate Output

- Up to 800 conversion per second
- Programmable adaptive digital filter
- Up to 16 000 000 internal resolution
- Up to 60 000 analogue output resolution
- Very low zero and gain drift at temperature changes.
- Very low drift in long term.



Analog Output With

- Bipolar load cell signal input for force measurement
- 6 wire load cell connection for high accuracy
- 2 pcs relay contact cutoff outputs and one zeroing input
- Bipolar analogue voltage output



Typical Applications

- Tank and silo weighing
- Compressive and tensile tests
- Force measurement
- Strength measurement
- Process control applications
- Dosing systems



TX13 analog load cell transmitter converts load cell signal to analog output very fast and accurately. Programmable smart filter of TX13 minimizes the environmental vibration to produce the best filtered signal to your PLC for your weight and force measurement systems. Its high quality analog & digital hardware eliminates zero and span drifts caused by temperature changes and provides perfect stability for long term unlike traditional analogue transmitters.

Analogue output is programmable as 4-20 mA, 0-20 mA, 0-10 V, 0-5 V. TX13 MB has additionally -10 to 10 V analog output range. All instruments are normalized and matched in the production for direct replacement when calibration done at the PLC side and to provide highest accuracy for electronic calibration (eCAL).

2 cut off outputs can be used for alarm or control valves; one digital input can be used for zeroing the scale.

TX13 Specifications

Analogue Output

Analogue output	TX13 TX13 MB	4-20 mA, 0-20 mA, 0-10 VDC or 0-5 V TX13 MB has additionally bipolar -10 to +10 V output.
D/A conversion		16 bit high resolution and very low drift DAC
Analogue output resolution		Up to 60 000 steps.
Analogue output update rate		Up to 800 conversion per second.

Load Cell Signal

Load cell signal range		-18 mV to +18 mV.
Minimum load cell signal range		< 0,8 mV
Linearity		< 0.01 %
Temperature drift		< 0.005 % FSR / °C
A/D converter		24 bit Delta-Sigma ratiometric with integral analog and digital filters. High EMC immunity.
Internal resolution		Up to 16 000 000 counts.

Weighing

Calibration with test weight		Performed with rotary switches on the front of instrument or from PC/PLC
eCal electronic calibration		All instruments are matched at the production for high accuracy at electronic calibration via serial port.
Fast calibration		Automatic zero adjustment and span adjustment with load 20% max
Digital filter		9 step adjustable smart and adaptive filter.
Zeroing		Via serial port or opto isolated digital input.
Set points		2 programmable free setpoints, Relay contact: 240 VAC, 0.25 A or 30 VDC 0,15 A.

Load Cells

Excitation		5 VDC
Number of load cells		Up to 8 load cells 350 Ω or up to 24 load cells 1100 Ω (min. 43 Ω)
Connection		4 or 6 wire technique.

Serial Interface

RS-232C		For setup from PC / PLC or digital weight data output to connect it any other instrument.
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Power

Power supply	TX13 TX13 MB	12 - 28 VDC, max. 0.2 A 9 - 28 VDC, max. 0.3 A
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Environment and Enclosure

Enclosure		Polyamide, for DIN-rail mount, IP20
Front panel		3 x status LED, 2 x rotary switches for set up.
Dimensions		Width: 22,5 mm, Height: 99 mm, Depth: 114,5 mm
Operation temperature		Between -15°C and +55°C
Humidity		85% RH max, non-condensing.

