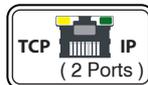


# TX20 Digital Transmitter

For Weight, Force, Moment and Pressure Sensors



## Features

- All Ethernet output products are dual-port for daisy chain connection
- Variant with direct connection to Profinet S2 System Redundancy
- Additional Modbus RTU communication for products with Fieldbus outputs
- High reliability with triple signal isolation
- Programming and calibration via Fieldbus
- Easy programming with Alphanumeric display
- Vibration filter: Stable reading for agitated tanks and vibrating environments
- eCal: Error-free adjustment with products calibrated in production
- Remote programming via web page (EN variant)
- Logging of device interventions and system failures



TX20 series digital transmitters are designed for force, moment, and pressure measurement processes in addition to static and dynamic weighing. They transfer precise measurement information acquired at a high conversion rate to your PLC/SCADA/PC system in the most accurate and fastest way with industrial communication protocols. All products with Ethernet output are dual-ported to provide Ethernet daisy chain connection. TX20 can also be connected to Profinet Redundant S2 systems directly. 3 digital inputs, 4 digital outputs, and analog outputs are available as additional connection options.

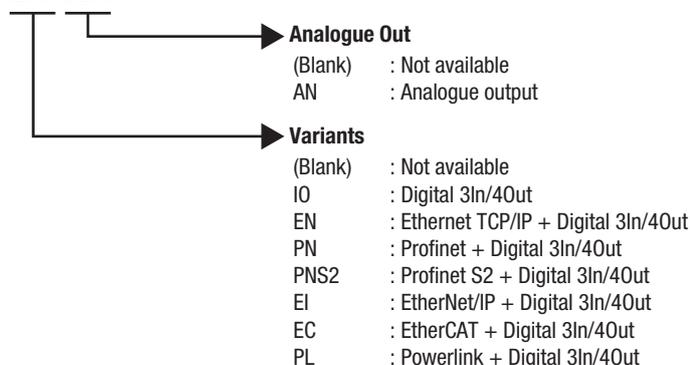
TX20 transmitters are manufactured identically to each other and individually calibrated. Thanks to this feature, they can be replaced directly without needing any adjustment in the counting mode, and in the weight mode error on the electronic calibration because of replacement is less than 0.00003%.

# Technical Specifications

A/D Converter	
Type	24-bit Delta-Sigma ratiometric with integral analog and digital filters and a conversion rate of up to 1600 cycles/second
Minimum input signal / vsi	0.1 $\mu$ V
Input signal range	0 mV to 75 mV unipolar or -75 mV to +75mV bipolar
Linearity and thermal drift	< 0.0015% FS, $\leq$ 2 ppm/ $^{\circ}$ C
Resolution	Internal : Up to 16 000 000 counts External: Max. 999 999 (weight and force mode), 2 000 000 counts in bipolar at full range and 1 000 000 counts in unipolar input
Calibration and Programming	
Calibration	Easily via the alphanumeric display and the buttons on the transmitter, Via a PC with BAYKON xFace software connected to the serial port, With PLC commands via Fieldbus for programming and zero/gain setting, eCal - Electronic calibration with high accuracy without a test load ( instrument error < 0.00004% )
Digital filter	7 steps programmable adaptive filter
Weighing functions	Taring, zeroing, auto zero tracking, auto tare, auto clear, auto print-out, motion detection, auto zero at power up, tare memory in case of power failure, increased resolution
Load cell	
Excitation and connection	5 VDC, max. 125 mA / 4 or 6 wires cable connection
Number of parallel load cells	Minimum 43 ohm. Up to 8 load cells 350 $\Omega$ or 25 load cells 1100 $\Omega$
Connection Options with Peripheral Units	
RS-485 serial output	1200 - 115200 baud, Length 7 or 8 bits; parity even, odd or none. Selectable as Continuous , BSI or Modbus RTU data communication protocol. Maximum station number is 31.
Digital inputs and outputs	3 opto-isolated, 12 - 28 VDC digital inputs and 4 opto-isolated, 12 - 28 VDC digital outputs
Analog output	Galvanically isolated, 0 - 20 mA, 4 - 20 mA, 0-5 VDC, 0-10 VDC, $\pm$ 5 VDC, $\pm$ 10 VDC Analog output
Enclosure and Environment	
Power consumption	10 - 28 VDC, min. 60 mA ~ max. 600 mA ( Depends on the TX20 model and the number of load cells)
Operation condition	-15 $^{\circ}$ C - +55 $^{\circ}$ C, 85% RH max, non-condensing
Enclosure material, type and protection class	Polyamid, DIN rail mount , IP20
Packing size and weight	132x112x30 mm, 254 g

## Ordering Code

### TX20 EN-AN



## Typical Applications

