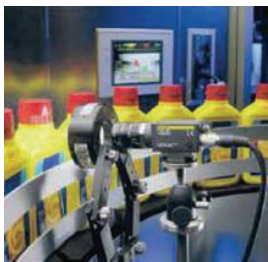


TX2 Digital Load Cell Transmitters

Precise Digital Weighing Data to PLC / DCS or PC

- RS-232C
- RS-485
- Modbus RTU
- Modbus TCP/IP
- Profibus DP
- Profinet
- CANopen
- EtherNet/IP
- EtherCAT
- CC-Link
- Powerlink



Features

- Communication: Reliable data transfer with industrial communication protocols for various PLC / DCS or PC systems
- High speed: 800 conversion/sec.
- Weighing functions: Zeroing & taring, power-on zero, AZT, net indication at power on, motion detection
- Software support: Windows based BAYKON xFace software for calibration and setup via PC
- eCal: Electronic calibration without test weight
- Vibration filter: Configurable active filter for stable weight



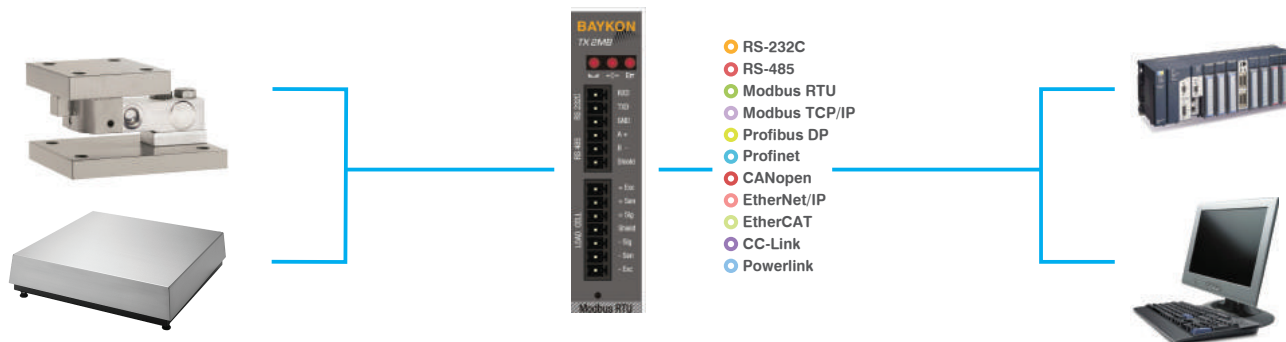
TX2 digital transmitter family is designed for static or dynamic weighing and force measurement processes to provide fast and accurate digital data through RS-232C, RS-485, Ethernet TCP/IP and bus systems as Profibus, Modbus TCP, Modbus RTU, Profinet, CANopen, EtherNet/IP, EtherCAT, CC-Link, Powerlink.

Weighing functions such as Zeroing, Taring, Power-On zero, Net indication at power on, Motion detection, etc. are integrated in TX2 transmitters. Configurable vibration suppression digital filter settings and calibration with test weight or electronic calibration without test weights (eCal) via Windows based BAYKON xFace software. DIN rail type enclosure provides easy montage in control panel.

Technical Specifications

TX2 Series Instruments	TX2 MB : RS-232 / RS-485 / Modbus RTU TX2 EI : EtherNet/IP TX2 EN : Ethernet / Modbus TCP/IP TX2 EC : EtherCAT TX2 PB : Profibus DP TX2 CC : CC-Link TX2 PN : Profinet TX2 PL : Powerlink TX2 CO : CANopen
A/D Converter	
Type	24 bit Delta-Sigma ratiometric with integral analog and digital filters
Conversion rate	Up to 800 measurements per second
Minimum input voltage	< 1 mV
Minimum input sensitivity	0.1µV per interval
Analogue input range	0 mV to 18 mV unipolar or -18 mV to 18 mV bipolar
Linearity	Within 0.0015% FS, 2 ppm/°C
Resolution	Internal up to 8 000 000; External up to 100 000 counts in Weighing / Force modes, 1 000 000 counts for unipolar input and for selected range in Count mode and 2 000 000 counts for bipolar input and for selected range in Count mode
Calibration and Programming	
Calibration	By etalon weights: Via xFace software or fieldbus eCal: Electronic calibration without etalon weights via xFace Count mode: All instruments are adjusted in production for equal performance. Calibration at PLC side
Digital filter	10 step adjustable digital adaptive filter
Weighing functions	Tare, zero, auto zero tracking, motion detection, auto-zero at power-up, net indication at power on
Load Cell	
Excitation	5 VDC, max. 100 mA
Number of load cells	Up to 6 load cells 350 Ω or 18 load cells 1100 Ω in parallel
Connection	4 or 6 wire technique. Cable length 274 m/mm ² for 6 wire connection
Communication	
Serial Interface RS-232C	9600 baud, 8 None 1, continuous data output or BSI (Baykon serial interface) communication protocol
Serial Interface RS-485 (TX2 MB)	1200 to 57600 baud, 7 even/odd, 8 None 1, continuous data output, BSI or Modbus RTU comm. protocol
Modbus RTU interface (TX2 MB)	Up to 31 units on the bus, Baudrate up to 57600
Ethernet / Modbus TCP/IP (TX2 EN)	10Mbits (half duplex), galvanically isolated
Profibus DP V1 interface (TX2 PB)	9,6 kbits/s to 12 Mbits/s automatic baudrate detection
ProfiNet interface (TX2 PN)	100Mbits (full duplex), galvanically isolated
CANopen interface (TX2 CO)	10 kbits/s to 1 Mbits/s automatic baudrate detection
EtherNet/IP (TX2 EI)	10 Mbit/s or 100 Mbit/s, full duplex, galvanically isolated Addressing: Assign DHCP or manual IP with PC software
EtherCAT (TX2 EC)	100 Mbit/s, full duplex, galvanically isolated
CC-Link (TX2 CC)	156 kbps - 10 Mbps communication speed Addressing: Up to 64 stations per network
Powerlink (TX2 PL)	100Mbit/s, half duplex
Power Supply and Others	
Power Supply	10 to 28 VDC, min 60mA – max. 600 mA (According to model and connected load cell units)
Enclosure	Polyamide, for DIN-rail mount, protection class IP20
Operation Conditions	Between -15°C and +55°C at 85% RH max, non-condensing

Typical Application



Specifications are subject to change without notice. 07 -07 / 2022