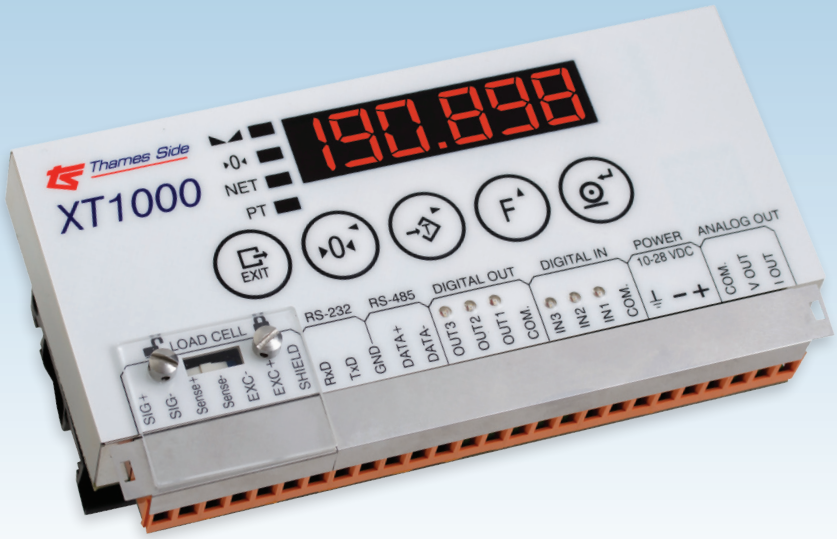
XT1000

Thames Side

DIN RAIL MOUNTED WEIGHING INDICATOR AND HIGH SPEED TRANSMITTER



Incorporating the latest up-to-date electronics, the Model XT1000 is a high performance display indicator and high speed data transmitter suitable for static and dynamic weighing. It is specially designed for process weighing systems, as well as all types of machinery with weighing as part of their function. Because of its DIN/Omega rail mount design and versatility of digital input/output and data transmission options, it is ideally suited to connection to PLCs, PCs and remote systems.

Typical applications include: weighing and level measurement of tanks and silos, filling and dosing machines, checkweighers, animal weighing, high speed sorting scales and multihead weighers. The XT1000 is ideal for check-weighing and other dynamic applications, thanks to the integrated checkweigher mode and the high speed data capture rate of 2400 measurements/second.

Calibration can be accomplished either by using real weights or by using the load cell sensitivity in mV/V, allowing for fast start-up and commissioning.

The XT1000 is approved according to OIML R76 and EN 45501 as a Non-Automatic Weighing Instrument.

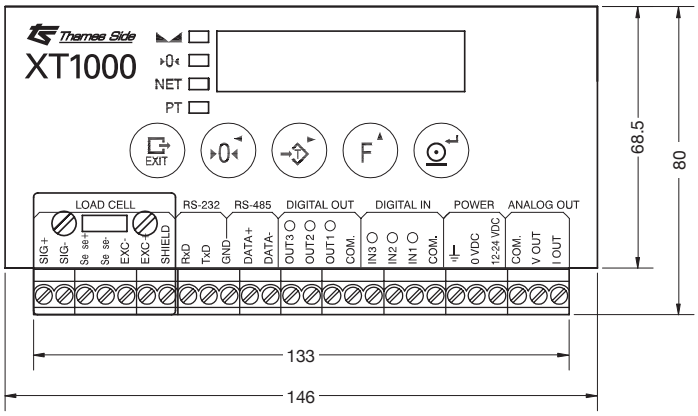
Five versions are available; the basic version has digital I/O, RS232 and RS485; 4 further versions add either analogue outputs, PROFIBUS, PROFINET or Ethernet/IP communications.

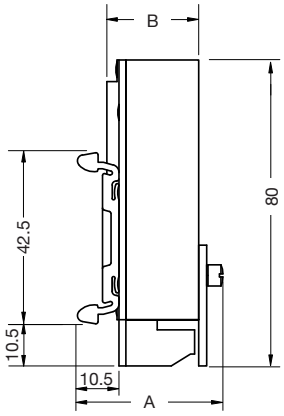
- Bright, 6 digit, 10mm LED display
- High resolution with 24-bit ADC and 16 000 000 internal divisions
- 2400 measurements per second
- Configuration and calibration using software or integral keypad
- Calibration protection by software or mechanically
- Powers up to 8, 350Ω or 16, 700Ω load cells
- RS232 and RS485 (Modbus RTU and ASCII) and optional PROFIBUS, PROFINET or Ethernet/IP
- Configurable analogue outputs: 0-5V, 0-10V, 0-20mA and 4-20mA, with galvanic isolation
- 3 digital opto-isolated inputs and 3 digital outputs to relay, with status LEDs
- DIN/Omega rail mounting
- 10-28 V DC power supply. Optional AC-to-DC adapter available (DIN rail mounted)

OIML CE

XT1000

technical specification...





Version	A	B	Transport Weight
XT1000-SO	34	29	0.3kg
XT1000-SO-AN	34	29	0.3kg
XT1000-SO-PB	38	33	0.35kg
XT1000-SO-PN	38	33	0.35kg
XT1000-SO-ETHERNET-IP	38	33	0.35kg

All dimensions in mm.
Connection terminals shown are for version XT1000-SO-AN.

XT1000 Indicator / Transmitter

Load Cell Connection	
Load cell sensitivity range	+/- 3.9 mV/V
Resolution	ADC 24-bit; 16 000 000 internal divisions
	Display -99 999 to 999 999
Measuring rate	Internal: 2400 readings per second
	Transmission: 600 readings per second
Linearity error	≤ 0.01% of measuring range
Thermal stability	Zero: 150 nV / °C max.
	Span: 3.5 ppm / °C max.
Load cell excitation voltage	5.0 V DC
Minimum load cell resistance	58Ω (6 load cells of 350Ω, 12 load cells of 700Ω)

Inputs & Outputs	
Serial communications	RS-232 bi-directional
	RS-485 half-duplex
	Protocol: Own protocol, Modbus (RTU & ASCII)
	Transmission rates: 4800 to 115200 bauds selectable
Logical inputs	3 opto-isolated inputs with status LED
Logical outputs	3 relay outputs max. 125V AC – 30V DC, 100mA with status LED
Analogue Output (XT1000-SO-AN version)	Output with galvanic isolation, DAC of 16 bits
	Output voltage: 0-10V
	Output current: 0/4 - 20mA (<500Ω)
PROFIBUS communication (XT1000-SO-PB version)	PROFIBUS DP-V0 (Slave)
PROFINET communication (XT1000-SO-PN version)	PROFINET I/O Real-time (Class A)
Ethernet/IP communication (XT1000-SO-ETHERNET-IP version)	Ethernet/IP

Additional Data	
Power supply	10V to 28V DC
Power consumption	4W maximum (6W for PROFIBUS, PROFINET and Ethernet/IP versions)
Operating temperature range	-20 °C to 50 °C
Storage temperature range	-25 °C to 60 °C
Mounting	DIN rail, IP40
Operator interface	Keyboard: 5 membrane keys
	Display: 6 digit LED, 10mm high
Options	With serial outputs only (model XT1000-SO)
	With serial and analogue outputs (model XT1000-SO-AN)
	With serial outputs and PROFIBUS (XT1000-SO-PB)
	With serial outputs and PROFINET (XT1000-SO-PN)
	With serial outputs and Ethernet/IP (XT1000-SO-ETHERNET-IP)
Approvals	OIML R76
	EN 45501:2015 (NAWI)
Optional Power Supply	DIN rail mount power supply Universal voltage 100-240V AC 50/60Hz 24V DC output Maximum Power 15W, capable of driving 3 off XT1000 units (-SO and -SO-AN versions) or 2 off XT1000 units (-SO-PB, -SO-PN and –SO-ETHERNET-IP versions). Part number is XT1000-2000-PS

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Our policy is one of continuous product enhancement. We therefore reserve the right to incorporate technical modifications without prior notification.