

FT-111 panel weighing indicator



product description

The FT-111 panel weighing indicator is a multi-function device for universal use across multiple applications including weighing, labelling, basic peak, hold function and dynamic system monitoring, by way of digital outputs and fieldbus connections. The indicator also allows for 500 records to be saved.

The colour selectable LCD display and the bar graph are helpful in process weighing applications. The indicator uses an intuitive text-based menu guide, allowing for easy operation. The front panel is rated to IP67.

optional interface

Profibus, Profinet, CANopen, EtherNET/IP, EtherCAT, CC-Link, Powerlink

Digital Inputs / Outputs Opto-isolated 4 digital input, 12 to 28V DC, 10mA / 5 free relay contact, 250V AC or 30 VDC, 0.2A

Analogue Output 0-10VDC und 4-20mA

key features

Panel housing, stainless steel front panel, IP67

Max. conversion rate of 1600 updates per second

Calibration with test weight or eCal

Span adjustment under load (for silos)

EU-Type Examination Certificate, 10,000 e (R76)

Input sensitivity: 0.4 $\mu\text{V/e}$ (legal-for-trade), 0.05 $\mu\text{V/d}$ (industrial)

Standard interfaces RS232C, RS422, RS485, Ethernet TCP/IP, USB

Power Supply 12...28 VDC

Wide range of optional fieldbuses

Modbus as standard



specifications

Accuracy

Accuracy class	III
EU Type approved	10,000 intervals

Display and Keyboard

Display	LCD display with multicolour backlight, 6 digits 22mm height
Keyboard	membrane with tactile feedback
Key lock	Basic weighing related key can be locked against unauthorized access

A/D Converter

Type	24 bit Delta-Sigma with integral analogue and digital filters
Conversion rate	Up to 1600 measurement values per second
Minimum input sensitivity	0.05 μ V/d (not legal for trade) 0.4 μ V/d (legal for trade)
Analogue input range	-5mV to 19mV
Resolution	Internal up to 16 million counts, display up to 300,000 counts not legal for trade / 10,000 counts legal for trade
Linearity & temperature coefficient	Within 0.0015 % FS; \leq 2 ppm/ $^{\circ}$ C

Scale Calibration & Functions

Calibration	Calibration is performed by application weights or via (eCal)
Digital filter	5 step adjustable adaptive Filter
Weighing functions	Taring, zeroing, auto zero tracking, motion detection, auto zero at power up, tare status save at power off, increased resolution, automatic tare and clear, temporary gross indication, unit change, date & time
Process functions	Labelling, livestock weighing, basic peak, hold function
Optional digital inputs / digital outputs	4x isolated digital inputs 12...28V DC, 10mA / 5x relay contact 250V AC or 30V DC, 0.2A
Memory	Limit values for weighing. Optional alibi memory for 999,999 records.

Load cells

Excitation	5 V DC max. 125 mA
Number of load cells	Up to 8 load cells (350 Ω) or 25 load cells (1100 Ω) in parallel
Connection	4-wire or 6-wire technology. Cable length 1000 m/mm ² for 6-wire connection

Communication & Interfaces

Serial interfaces	RS232C, RS 485 , Ethernet TCP/IP, USB
Optional interfaces	CC-Link IE, Profibus, ProfiNet, CANopen, EtherNET/IP, EtherCAT, CC-Link, Powerlink, Analogue output

Power Supply & Environment & Enclosure

Power Supply	12...28V DC max. 750mA
Operation temperature & humidity	-10 $^{\circ}$ C to +40 $^{\circ}$ C legal for trade; 85% RH max, non-condensing / -15 $^{\circ}$ C to +50 $^{\circ}$ C not legal for trade
Dimensions (W x H x D)	108x205x112.5, cutout dimensions (HxW) 92x186
Enclosure	IP67, Stainless steel (Front panel)

Dimensions and specifications are subject to change without notice.