

FT-111 weighing indicator



product description

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

The indicator uses an intuitive text based menu guide, allowing for easy operation. Two versions are available with a stainless-steel housing that can be ordered with a flat profile for wall mounting or with a tilted profile for flat surface mounting. Both versions are rated to IP67 and can be purchased with specialist mounting kits.

optional Interface / inputs and outputs

Profibus	Profibus DPV1. 9,6 kbit/s to 12Mbit/s aut. baudrate detection
Profinet	100 Mbit/s full-duplex, galvanically isolated
CANopen	10 kbit/s - 1 Mbit/s aut. baudrate detection
EtherCAT	100 Mbit/s full-duplex, galvanically isolated
CC-Link	156 Kbit/s or 10 Mbits, baudrate detection
Powerlink	100 Mbit/s, half-duplex
Digital Inputs / Outputs	Opto-isolated 4 digital input, 12 to 28V DC, 10mA / 5 free relay contact 250V AC or 30V DC, 0.2A
Analogue Output	0-10V DC and 4-20mA

key features

EU Type approved for 10,000 intervals

Up to 8 load cells 350Ω or 25 load cells 1,100Ω

4-wire or 6-wire technology

5 steps programmable adaptive filter

Standard Interface RS232C, RS485, USB, EtherNET TCP/IP

Simple upgrade of available options

Calibration with eCal or test weights

Power supply 100...240V AC or 12...28V DC

Modbus RTU and TCP/IP



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 800 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 999,999 counts not legal for trade / 10,000 counts legal for trade
Linearity & temperature coefficient	Within 0.0015 % FS; ≤ 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
Process functions	Labelling, livestock weighing
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	2x RS232C, RS 485, USB, Ethernet TCP/IP
Optional interfaces	Profibus, ProfiNet, CANopen, EtherNET/IP, EtherCAT, CC-Link, Powerlink, Analogue output

Power Supply & Environment & Enclosure

Power Supply	12...28V DC max. 750mA or 100...240V AC max. 75mA
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)	Desk type 250 x 180 x 85 mm, Wall type 260 x 200 x 64 mm
Enclosure	IP67, Stainless steel

Dimensions and specifications are subject to change without notice.

