FT-111 weighing indicator

product description

The FT-111 weighing indicator is a multi-function device for universal use across multiple applications. Available in both analogue and digital, the indicator is ideal for weighing applications, labelling and dynamic system monitoring.

The FT-111 uses an intuitive text-based menu guide, allowing for easy operation with the ability to save up to 500 records. The analogue version allows up to 25 load cell connections, whilst the digital version allows up to 16 RC3D load cells. The digital FT-111 also includes a surge protections device between the terminal and the connected load cells.

The indicator is housed in a modern enclosure with covered cable entries for surface mounting. It made from stainless steel and has an IP rating of IP67. The indicator is also available with inputs and outputs and numerous fieldbus options.

optional interfaces

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

Stainless steel housing, IP67

Analogue or digital load cells connection

Max. conversion rate of 800 updates per second

Calibration with test weight or eCal

Span adjustment under load

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

Input sensitivity: 0.4 µV/e (legal-for-trade), 0.05 µV/d (industrial)

Standard interfaces 2 x RS232C, RS485, Ethernet TCP/IP, USB

Power supply 100...240 VAC or 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 800 measurement values per second
Minimum input sensitivity	0.05µV/d (not legal for trade) 0.4µV/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/°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	FT-111 analogue	FT-111 digital
Excitation	5 V DC max. 125 mA	12 V DC; 1.3 A external LPK4 box
Number of load cells	Up to 8 load cells (350 Ω) or 25 load cells (1 100 Ω) in parallel	Up to 16 x RC3D load cells
Connection	4-wire or 6-wire technology. Cable length 1000 m/mm² for 6-wire connection	4-wire technology. Cable length 500m
Protocol	-	RS485 halfduplex with digital RC3D load cell

Power Supply & Environment & Enclosure

Power Supply	12...28V DC max. 750mA or 100...240V AC max. 75mA
Operation temperature & humidity	-10°C to +40°C legal for trade; 85% RH max, non-condensing /-15°C to +50°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

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

Dimensions and specifications are subject to change without notice.