

# FT-111D weighing indicator



## product description

The FT-111D weighing indicator is a digital, multi-function device for RC3D load cell connection. 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.

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. Included in the scope of delivery is a LPK24 box made of stainless steel with integrated surge protection. It serves as a power supply between the terminal and the connected digital load cells.

## optional Interface / inputs and outputs

Profibus	Profibus DPV1, 9,6 kbits/s to 12Mbit/s aut. baudrate detection
Profinet	100 Mbit/s full-duplex, galvanically isolated
Ethernet TCP/IP	10 Mbit/s full-duplex
CANopen	10 kbit/s - 1 Mbit/s aut. baudrate detection
EtherNET/IP	10 Mbit/s or 100 Mbits, galvanically isolated
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
Modbus	RTU and TCP/IP

## key features

EU Type approved for 10,000 intervals

Up to 16 x RC3D load cells

External power supply via LPK24 box 12VDC;1.3A

5 steps programmable adaptive filter

Standard Interface RS232C, RS485, USB

Simple upgrade of available options

Calibration with eCal or test weights

Power supply 100...240V AC

LPK24 box with integrated surge surge protector

IP67 protection class



## specifications

### Accuracy

Accuracy class	III
EU Type approved	10,000 intervals

### Display and Keyboard

Display	LCD display with multicolour backlight display up to 999,999 counts not legal for trade / 10,000 counts legal for trade, 6 digits 22mm height
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
Resolution	Internal up to 16 million counts
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 saves 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.

### Digital Load cells

Excitation	12 V DC; 1.3 A external LPK4 box
Number of load cells	Up to 16 x RC3D load cells
Connection	4-wire technology. Cable length 500m
Protocol	RS485 halfduplex with digital RC3D load cell

### Communication & Interfaces

Serial interfaces	2x RS232C, RS 485, USB
Optional interfaces	Ethernet TCP/IP, Profibus, Profinet, CANopen, EtherNET/IP, EtherCAT, CC-Link, Powerlink, Analogue output

### Power Supply & Environment & Enclosure

Power Supply	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
Accessory	Wall type, 2-D Wall type, Column mounting set

Dimensions and specifications are subject to change without notice.

