

# FT-112 panel weighing indicator



## product description

The FT-112 weighing terminal is a high precision, multi-functional device allowing for universal use across multiple applications. SmartAPP functionality allows for the indicator to be universally used in industrial weighing applications including dynamic weighing, labelling, checkweighing, classifying, peak hold connections. The colour changeable display helps to better control the weighing operations like in food, pharmaceutical and chemical industries. The indicator supports Preset Tare and net sign correction. The indicator uses an intuitive text based menu guide, allowing for easy operation. The standard interfaces RS232, RS422, RS485, USB, Ethernet TCP/IP makes it easy to integrate and connect FT-112 panel to other system. The front panel is rated to IP67.

## 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
CANopen	10 kbit/s - 1 Mbit/s aut. baudrate detection
EtherNET/IP	10 Mbit/s or 100 Mbps, galvanically isolated
EtherCAT	100 Mbit/s full-duplex, galvanically isolated
CC-Link	156 Kbit/s or 10 Mbps, baudrate detection
Powerlink	100 Mbit/s, half-duplex
CC-Link IE	1 Gbit/s
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 10,000 intervals

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

Unit change

5 steps programmable adaptive filter

Standard Interface RS232C, RS422, RS485, USB, Eth. TCP/IP

Calibration with eCal or test weights

Power supply 12...28V DC

Available as FT-112(D) Panel, for connection to the RC3D load cell

Preset Tare

Net sign correction



## 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 $\mu$ V/d (not legal for trade) 0.4 $\mu$ 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, classifying, checkweighing
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 $\Omega$ ) or 25 load cells (1100 $\Omega$ ) in parallel
Connection	4-wire or 6-wire technology. Cable length 1000 m/mm <sup>2</sup> for 6-wire connection

### Communication & Interfaces

Serial interfaces	RS232C, RS422, RS485 , Ethernet TCP/IP, USB
Optional interfaces	CC-Link IE, Profibus, ProfiNet, CANopen, EtherNET/IP, EtherCAT, CC-Link, Powerlink, Analogue output, Modbus RTU/TCP

### 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.

