

FT-112 Weighing Terminal



Product Description

The FT-112 weighing indicator is a high precision, multi-functional device allowing for dual scale connections and weight totalling function.

SmartTRACK functionality allows for the indicator to be universally used in industrial weighing applications, including the food, pharmaceutical and chemical industries.

The indicator uses an intuitive text based menu guide, allowing for easy operation. Two versions are available with a stainless steel housings 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
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-dublex
Digital Inputs / Outputs	Optoisolated 4 digital input, 12 to 28 VDC, 10mA / 5 relay contact 5 free relay contact, 250 VAC or 30 VDC, 0.2A
Analogue Output	0-10VDC und 4-20mA
Modbus	RTU and TCP/IP

Key Features

EU Type approved for
10 000 intervals

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

Up to 2 scales with sum function

4-wire or 6-wire technology

5 steps programmable adaptive
filter

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

SD card slot for alibi memory

Smart Track function

Simple upgrade of available
options

Calibration with eCal or
test weights

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



Specifications

Model	FT-112
Accuracy	
Accuracy class	III
EU Type approved	10 000 intervals
Display and Keyboard	
Display	LCD display with multicolor backlight, 6 digits 22 mm 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 analog and digital filters
Conversion rate	Up to 800 measurement values per second
Minimum input sensitivity	0.05 $\mu\text{V/d}$ (non legal for trade) 0.4 $\mu\text{V/d}$ (legal for trade)
Analogue input range	-5 mV 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/ $^{\circ}\text{C}$
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	Labeling, piece counting, checkweighing, classifying, filling, free setpoints, functional outputs, totalization, livestock weighing
Optional digital inputs / digital outputs	4x isolated digital inputs 12...28 VDC, 10 mA / 5x relay contact 250 VAC or 30 VDC, 1 A
Memory	ID1, ID2, Limit values for weighing, Limit values for piece counting, average piece weight of Item memory, preset tare memory. Each memory size has capacity for 500 records; optional alibi memory for 999 999 records
SD card	SD card slot for alibi memory
Load cells	
Excitation	5 V DC max. 125 mA
Number of load cells	Up to 8 load cells (350 Ω) or 25 load cells (1 100 Ω) in parallel
Connection	4-wire or 6-wire technology. Cable length 1 000 m/mm ² for 6-wire connection
Scale	Connectable up to 2 scales with sum function
Communication & interfaces	
Serial interfaces	2x RS232C, RS 485 , Ethernet TCP/IP, USB
Optional interfaces	Ethernet IP, Profibus, ProfiNet, CANopen, EtherCAT, CC-Link, Powerlink, analogue output
Power Supply, Environment & Enclosure	
Power Supply	12...28 VDC max. 750 mA or 100...240 VAC max. 75 mA
Operation temperature & humidity	-10 $^{\circ}\text{C}$ to +40 $^{\circ}\text{C}$ legal for trade; 85% RH max, non-condensing / -15 $^{\circ}\text{C}$ to +50 $^{\circ}\text{C}$ 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	IP 67, Stainless steel

Dimensions and specifications are subject to change without notice.

