

Type FT-12 Weight Indicator



Product Description

The FT-12 Weight Indicator is a very accurate, versatile, general purpose instrument, available in different housings, meeting the industries demand for various environmental conditions.

The instrument is approved by Weights & Measures Authorities for use in Accuracy Class III applications with up to 10 000 intervals according to OIML R76.

Large 6 digit LED weight display (red 20 mm / panel type 14 mm) with weight status information.

Tactile 18-key keyboard for basic scale functions, specific functions and numeric data entry

With a variety of interface options and selectable specific scale functions the FT-12 is the perfect fit to weighing systems and process control systems.

Available Accessories

- Wall mounting kit and stand mounting kit for desk type housing
- Stand mounting kit for stainless steel housing
- Setup-Software running under MS Windows

Key Features

- EU Type approved for 10 000 intervals
- Single or dual range
- High internal resolution, display up to 60 000 counts
- Approved sensitivity 0.4 $\mu\text{V/e}$
- Application programs for weighing, basic filling, check weighing, dynamic weighing (e.g. animal weighing) and peak hold
- Serial Interface RS232C
- Conversion rate max. 100/s
- Integrated power supply

Options

- Alibi memory (up to 149 760 records)
- Second serial interface RS232C
- Third serial interface RS485 and Modbus RTU
- Ethernet TCP/IP and Modbus TCP
- Isolated digital inputs & outputs
- Analogue output (0-10 V and 4-20 mA)
- Rechargeable battery

Specifications

ACCURACY

| | |
|---|---|
| Accuracy Class | III |
| EU Type approved (verification scale intervals) | 10 000 vsi (single range) or 2 X 6 000 vsi (dual range) |

DISPLAY AND KEYBOARD

| | |
|---------------------|--|
| Display | 6 digits, 7 segments, LED red, 20 mm high (Panel type 14 mm high) |
| Update rate | 250 ms |
| Status annunciators | Gross, net, motion, zero, weighing range, information, power, unit |
| Keyboard | 18-key membrane, with tactile feedback |
| On / off switch | Desk type, stainless steel: yes; Panel type: no |

A/D CONVERTER

| | |
|---------------------------------------|---|
| Type | 24 bit Delta-Sigma ratiometric with integral analog and digital filters |
| Conversion rate | Maximum 100 measurement values per second |
| Minimum input sensitivity | 0.1 μ V/d |
| Certified accuracy according OIML R76 | 0.4 μ V/vsi (legal for trade) |
| Analogue input range | 0 mV to 20 mV |
| Resolution | Internal up to 8 million counts; display up to 60 000 counts |

SCALE CALIBRATION AND FUNCTIONS

| | |
|--------------------|---|
| Calibration | Calibration is performed electronically or by application weights; corner adjustment only externally |
| Digital filter | 10 step adjustable digital adaptive filter |
| Application modes | Basic weighing, filling, check weighing (over/under), dynamic weighing and peak hold |
| Weighing functions | Tare, zero, auto zero tracking, motion detection, auto-zero at power-up |
| Other functions | Date & time, label number, total indication, temporarily switching between net and gross, 2 x ID code, alphanumeric ID table can be downloaded, EPL format barcode label printing |
| Set points | 3 set points, programmable (needs digital I/O option) |
| Tilting | Inhibits weighing when scale is tilted (needs digital I/O option) |
| Memory | Up to 99 IDs (alphanumeric), up to 99 preset tare and 9 setpoint groups (3 set points per group) can be stored |
| Alibi Memory | Optionally available; 74 880 records or 149 760 records |

LINEARITY AND STABILITY

| | |
|-------------------------------------|--|
| Linearity & temperature coefficient | Within 0.0015 % FS; \leq 2 ppm/ $^{\circ}$ C |
|-------------------------------------|--|

LOAD CELLS

| | |
|----------------------|---|
| Excitation | 5 V DC at 58...1 200 Ω , max. 100 mA |
| Number of load cells | Up to 6 load cells (350 Ω) or 18 load cells (1 100 Ω) in parallel |
| Connection | 4 or 6 wire technique. Cable length 274 m/mm ² for 6 wire connection |

COMMUNICATION

| | |
|-----------------------------|--|
| Serial interface | RS232C, 1200...57 600 baud, programmable |
| Continuous mode update rate | 100 ms |
| Option board update rate | 40 ms |

ENVIRONMENT AND ENCLOSURE

| | |
|-----------------------|---|
| Operation Temperature | -10 $^{\circ}$ C to +40 $^{\circ}$ C legal for trade; 85% RH max, non-condensing. |
| Dimensions | See data sheet E159 |

| Enclosure | Panel type (front IP65) | Aluminium cast desk type (IP30) | Stainless steel housing (IP65) | |
|-----------|-------------------------|---------------------------------|--------------------------------|-------------|
| | | | 70 mm deep | 100 mm deep |

POWER SUPPLY

| | | | | | | | | | | | | | |
|---|---|--|---|---|---|---|--|--|---|---|--|---|---|
| 230 V AC, 50/60 Hz, max. 12 VA | • | | | | • | | | | • | | | | |
| 230 V AC, 50/60 Hz, with rechargeable battery | | | | 0 | | | | | | 0 | | | |
| 12 V DC, max. 12 VA | | | 0 | | | 0 | | | | | | 0 | |
| 24 V DC, max. 12 VA | | | 0 | | | 0 | | | 0 | | | | 0 |

OPTION FOR ADDITIONAL INPUTS / OUTPUTS (for two or more options please contact FLINTEC)

| | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 nd Serial interface (RS232), max. 57 600 baud | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 rd Serial interface (RS232 / RS485 / Modbus RTU) | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ethernet interface, Modbus TCP/IP, 100 Mbit/s | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Analogue output (16-bit): 4-20 mA / 0-10 V | 0 | - | 0 | 0 | - | - | 0 | 0 | - | 0 | 0 | 0 | - | 0 |
| 3x isolated digital inputs (24 V) and 3x isolated digital outputs (open collector) | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

ADDITIONAL MECHANICAL HARDWARE

| | | | | |
|-----------------|---|---|---|---|
| Wall mount kit | - | 0 | • | • |
| Stand mount kit | - | 0 | 0 | 0 |

• standard version 0 optionally available - not available