



## Product Description

The FT-13 Weight Controller is a very accurate and versatile weight indicator which is used for a wide variety of process weighing applications including filling and dispensing. Whether filling or dispensing solids, liquids or gases, the FT-13 Weight Controller automates the entire process. Its variety of interface options and selectable specific scale functions perfectly fit to weighing systems and process control systems.

FT-13 increases the flexibility by offering the possibility to implement specific functions / interlockings with its free programmable feature.

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

## Available Accessories

- Stand mounting kit for stainless steel housing

## Key Features

- EU Type approved for 10 000 intervals
- High internal resolution, display up to 60 000 counts
- Approved sensitivity 0.4  $\mu\text{V/e}$
- Serial Interface RS232C
- 4 digital inputs & 8 digital outputs
- Conversion rate max. 400/s
- Integrated power supply
- Pre-configured applications for typical filling / dispensing tasks
- Programmable functions / interlockings for further optimisation

## Options

- Second programmable serial interface RS232C / RS485 and Modbus RTU
- Ethernet interface TCP/IP and Modbus TCP
- Profibus DP-V0 and DP-V1
- Additional isolated digital inputs & outputs

Specifications				
<b>ACCURACY</b>				
Accuracy Class	III			
EU Type approved	10 000 intervals single range			
<b>DISPLAY AND KEYBOARD</b>				
Display	6 digits, 7 segments, LED red, 20 mm high (Panel type 14 mm high)			
Status annunciators	Gross, net, motion, zero, information, power, unit and 6 LED's for application related status			
Keyboard	18-key membrane, with tactile feedback			
On / off switch	Stainless steel: yes; Panel type: no			
Key lock	Keys are locked automatically during filling process			
<b>A/D CONVERTER</b>				
Type	24 bit Delta-Sigma ratiometric with integral analog and digital filters			
Conversion rate	Max. 400 measurement values per second			
Minimum input per vsi	0.4 $\mu$ V per interval legal for trade; 0.1 $\mu$ V per interval non approved			
Analogue input range	0 mV to 20 mV			
Resolution	Internal up to 8 million counts, display up to 60 000 counts			
<b>SCALE CALIBRATION AND FUNCTIONS</b>				
Calibration	Calibration is performed by application weights			
Digital filter	10 step adjustable digital adaptive filter			
Application modes	Open container filling, bungle container filling, below surface filling, filling & emptying, filling & discharging, weigh-in/weigh-out, discontinuous totalizer			
Weighing functions	Tare, zero, motion detection			
Other functions	Date and time, label number, total indication, temporarily switching between net and gross			
Digital inputs / digital outputs	4x isolated digital inputs (24 V) and 8x isolated digital outputs (open collector)			
<b>LINEARITY AND STABILITY</b>				
Linearity & temperature coefficient	Within 0.0015 % FS; $\leq$ 2 ppm/ $^{\circ}$ C			
<b>LOAD CELLS</b>				
Excitation	5 V DC, max. 100 mA			
Number of load cells	Up to 6 load cells (350 $\Omega$ ) or 18 load cells (1 100 $\Omega$ ) in parallel			
Connection	4 or 6 wire technique. Cable length 274 m/mm <sup>2</sup> for 6 wire connection			
<b>COMMUNICATION</b>				
Serial interface	RS232C, 1 200...57 600 baud, programmable			
<b>ENVIRONMENT AND ENCLOSURE</b>				
Operation temperature & humidity	-10 $^{\circ}$ C to +40 $^{\circ}$ C legal for trade; 85% RH max, non-condensing			
Enclosure	panel type ( front panel IP65 ) or stainless steel housing (IP65)			
		<b>Panel type</b>		<b>Stainless steel</b>
<b>POWER SUPPLY</b>				
230 V AC, 50/60 Hz, max. 12 VA	•		•	
12 V DC, max. 12 VA		0		0
<b>OPTION FOR ADDITIONAL INPUTS / OUTPUTS ( maximum is one option per instrument, for two options please contact FLINTEC)</b>				
2 <sup>nd</sup> Serial interface (RS232, RS485, Modbus RTU)	0	0	0	0
Profibus DP-V0 and DP-V1	0	-	0	-
Ethernet TCP/IP and Modbus TCP	0	-	0	-
4x isolated digital inputs (24 V) and 8x isolated digital outputs (open collector)	0	0	0	0
<b>ADDITIONAL MECHANICAL HARDWARE</b>				
Wall mount kit		-	•	
Stand mount kit		-	0	
	• standard version	0 optionally available		- not available