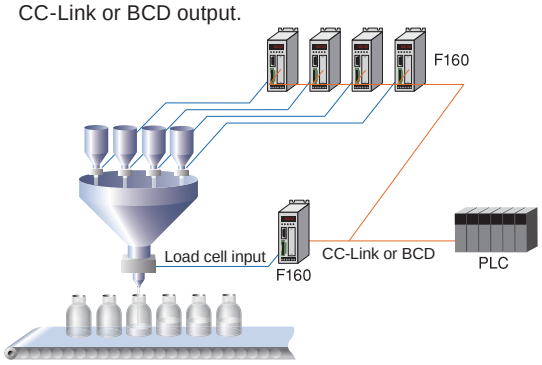
F160

BUILT-IN TYPE HIGH SPEED SAMPLING WEIGHING INDICATOR

RoHS

- RoHS-compliant product
- Compact size best for multiple unit integrate in a control panel
- High-speed A/D conversion and powerful digital processing capability of 1000 times/sec
- Ideal size display unit with simple key settings to check status and indicated value at any time. (Option interface is available for PLC host setting and communication purpose.)
- Super low drift of 0.1μV/°C
- Wall mount bracket fittings is available with vertical and horizontal.
- One option interface can be selected from CC-Link or BCD output.



Auto weighing system for industrial use

Specifications

ANALOG	Excitation voltage	DC10V ±5% Output current: within 120 mA Remote sense type (Up to 4 350Ω load cells can be connected in parallel.)
	Zero adjustment range	0 to approx. 2mV/V Auto adjusting method by digital processing.
	Span adjustment range	0.3 to 2.0 mV/V Auto adjusting method by digital processing.
	Min. input sensitivity	0.3μV/count
	Accuracy	Non-linearity·····within 0.01%/FS (Typ: 0.005%/FS at room temp.) Zero drift·····within 0.1 μV/℃ RTI(Typ:0.08μV/℃) Gain drift·····within 15 ppm/℃ (Typ: 5 ppm/℃)
	Analog filter	Bessel type low-pass filter (-12dB/oct.) Selectable from 2, 4, 6, 8 Hz
	A/D converter	Speed·····1000 times/sec Resolution·····24bit (binary)
DISPLAY	Display unit Measured value Display frequency	Character height 8mm 7-segment red LED, 6 digits 5digits Sign Minus sign on most significant digit 25times/sec. (Speed of system 1000 times/sec.)
EXTERNAL SIGNAL	Output signal (7 points)	Near Zero, SP1, SP2, SP3, Under, Go, Over, Complete, Normally OFF, Lower Limit, Upper Limit, Stable, Weight Alarm, Sequence Error, Final Error, In Operation (RUN), Clock (in an approximately one-second cycles) Each control output is selectable by setting. Transistor open collector output (Emitter = COM terminal) Output is set to LO when transistor is ON. Vceo = 30V (max), Ic = 50mA (max)
	Input signal (5 points)	Digital Zero Reset, Digital Zero, Tare Subtraction, Tare Reset, HOLD or Judge, Feed/Discharge, Sequence Start, Sequence Stop, No Function Each control input is selectable by setting. Set to ON when shorted to COM terminal through contact point (relay, switch etc.) or non-contact point (transistor, open collector etc.) Ic = 10 mA or lower
INTERFACE	SIF : BCO : CCL :	SI/F 2-wire serial interface BCD parallel data output interface (Option) CC-Link interface (Option)
GENERAL SPECIFICATIONS	Power supply voltage	DC24V (±15%)
	Power consumption	4W typ
	Operating conditions	Temperature: Operating temperature range −10℃ to +40℃ Storage temperature range −20℃ to +80℃ Humidity: 85%RH or less (non-condensing)
	External Dimensions	67(W)×185(H)×120(D) (mm) (not including protrusions)
	Weight	Approx. 1.2kg
ATTACHMENTS	Control signal Input/Output connector ……1 Jumper cable ……2 Operation Manual……1 Connector for BCD output (with BCD option) ……1 Connector for CC-Link (with CC-Link option) ……1	
OPTIONAL ACCESSORIES	CN20:57 series 14p connector for external I/O CN71:CC-Link connector	CN51:BCD Output connector CN80:Analog I/O connector terminal

Structure of product code

F160 □
① ②

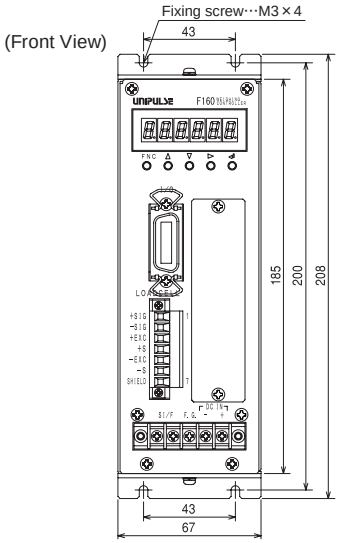
①Standard unit ②Interface

Sign	Interface
Standard	SI/F

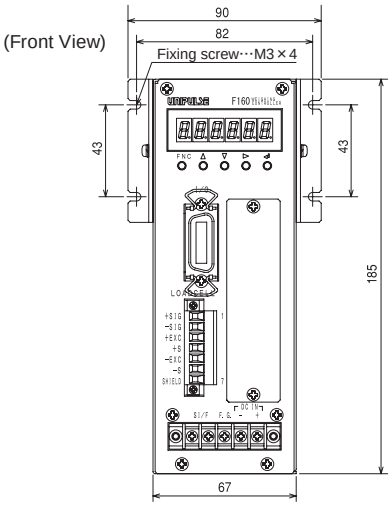
↓ One optional interface can be added in addition the standard interface.

BCO	BCD output(Sink type)
CCL	CC-Link

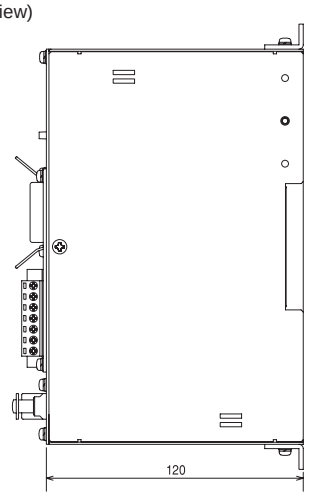
External dimension



Wall mount bracket (Vertically mount)



Wall mount bracket (Horizontally mount)



Unit: mm