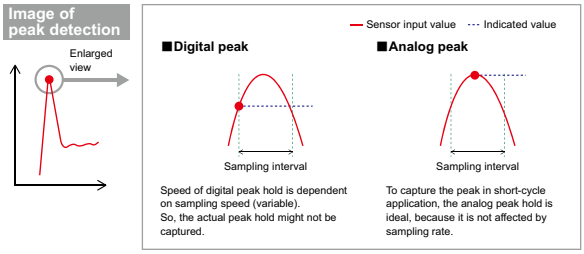
F325 DIGITAL INDICATOR WITH FAST PEAK HOLD FUNCTION

CE DIN 96×48 RoHS2

- Hi-speed A/D conversion rate of 3000 times/sec. (resolution: 24 bit)
- The high-performance filtering functions by using both analog and digital technology
- Cover wide range of applications: fast response time and high accuracy
- Free software for parameter setting is available

Analog peak hold

The peak of analog signal is captured by the peak hold circuit.
Since it is independent of sampling speed, it can hold the peak value at faster speed.



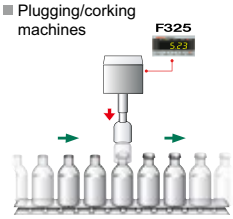
■Fast response

F325 processes the analog peak hold value at the speed of 3000 times/sec. and ouputs HI/OK/LO signal.
It is ideal for the application with short cycle time.

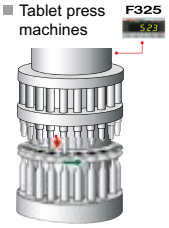
■High-accuracy

It can be also used for highly accurate weighing system by adjusting A/D conversion rate.

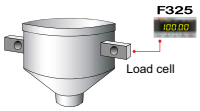
■ Plugging/corking machines



■ Tablet press machines



■ Digital gauge/ level meter



Specifications

Analog	Excitation voltage	DC 10 V, 2.5 V±10% (Depending on setting) Output current: Within 30 mA
	Signal input range	−3.0 to +3.0 mV/V
	Accuracy Non-linearity	0.02% FS±1 digit (at 3 mV/V input) Zero drift: Within 0.5 μV/℃ RTI, Gain drift: Within 25 ppm/℃
	A/D converter	Speed: 30, 300, 3000 times/sec. (Depending on setting), Resolution: 24 bit (binary)
	Analog filter	Primary low-pass filter (select frequency from 10 Hz, 30 Hz, 100 Hz, 300 Hz, 1 kHz, 3 kHz, 10 kHz, 30 kHz)
	Digital filter	Filter1: Bessel low-pass filter (secondary) Cut-off frequency can be set to any value from 1/300 to 1/10 of sampling speed. (It can be turned off.) 3000 times/sec.: 10 to 300 Hz, 300 times/sec.: 1 to 30 Hz, 30 times/sec.: 0.1 to 3 Hz Filter2: Moving average, You can set the value anywhere between OFF, 2 to 999 times.
	Resolution	1/30000 (at 3.0 mV/V input)
	Analog monitor output	Sensor input of approx. 2 V per 1 mV/V Input resistance over 2 kΩ or more
	Hold function	Sample or peak hold (You can chose either analogue or digital peak hold from setting menu. Frequency response of analog hold is 1 kHz)
Display	Display unit	15 mm character height: 7-segment green LED (5-digits) Numerical value: 5-digits Indicated value: −19999 to +99999 Decimal points: Selectable decimal point displaying position (0.000, 0.00, 0.0, 0)
	Display items	Status display: Red LED: HI, LO, PEAK, HOLD, Green LED: OK Display frequency: Selectable from 3, 6, 13 and 25 times/sec.
External I/O signal	External input (3)	DZ, HOLD, H.RESET ＜Volt-free contact input＞ External devices can be connected, such as relays, switches, transistors and so on. The signal can be outputted by making short-circuit between input and common terminal. In case transistor is connected, please use NPN (sink) transistor. Internal power supply voltage: DC 12 V, When short-circuited: Approx. 4 mA ＜DC-Input for both plus common and minus common type＞ (please specify the type of input when ordering) External devices can be connected, such as relays, switches, transistors and so on. Input signal is outputted by applying voltage between input and common terminal. In case a transistor is connected, please use NPN type for plus common and PNP type for minus common. Maximum Rated Voltage: DC 27.6 V, "ON": when the voltage is above DC 9 V (Load Current: approx. 10 mA at DC 24 V), "OFF: " below DC 3 V.
	External output (5)	HI, OK, LO, Output Selection 1, Output Selection 2 (Assign output from various selection: HH, LL, Overload, RUN, HOLD, NZ, DZ response) PhotoMOS relay output (common for sink and source type) Maximum rated voltage: DC 30 V, maximum rated current: 100 mA, operating time: approx. 1 msec
Interface	SIF: 2-wire type serial interface 485: RS-485 communication interface (Modbus-RTU/ UNI-format) BCO: BCD parallel data output interface (sink type) (Option) BSC: BCD parallel data output interface (source type) (Option)	DAV: D/A converter (voltage output) (Option) DAI: D/A converter (current output) (Option) 232: RS-232C communication interface (Option) * Only one option can be installed
General specifications	Power supply voltage	AC spec.: AC 100 to 240 V (+10%−15%) (free power supply 50/60 Hz) DC spec.: DC 12 to 24 V (±15%) (please specify the type of input when ordering)
	Power consumption	AC spec. 3 W typ. / DC spec. 4 W typ.
	Rush current typ.	AC spec.: 2 A, 1 msec: AC 100 V average load condition (cold start at room temperature) 4 A, 1 msec: AC 200 V average load condition (cold start at room temperature) DC spec.: 2 A, 20 msec: DC 12 V average load condition (cold start at room temperature) 1 A, 50 msec: DC 24 V average load condition (cold start at room temperature)
	Operating conditions	Operation temperature: −10 to +40℃ Storage temperature: −40 to +80℃ Humidity: 85% RH or less (non-condensing)
	External dimension	96(W) × 48(H) × 132.5(D) mm (Not including projections)
	Weight	Approx. 600 g
Attachments	AC input cord (AC power supply is selected) ····1 3P-2P conversion adapter (AC power supply is selected) ···1 Operation manual ····1 I/O connector block (wire entry holes: bottom)*1 ····1	I/O connector block (wire entry holes: top)*1 ····1 Terminator (RS-485 is selected) ····1 BCD output connector (BCD output option is selected) ····1
Optional accessories	CA325AC3P-B3: AC Supply cord 3 m (Same as the attachment) CA325AC3P-CEE7/7-B2: AC Supply cord (Voltage resistance: 250 V) 2 m CN3P-2P: 3P-2P converter plug for AC input cord (Same as the attachment) CN51: BCD output connector CN82: I/O connector block (wire entry holes: front)	CN83: I/O connector block (wire entry holes: bottom) (Same as the attachment) CN84: I/O connector block (wire entry holes: top) (Same as the attachment) SU03: DC lighting surge unit
CE marking certification	EMC directive EN61326-1 Safety standard EN61010-1, EN62311	

*1 Already mounted on the main unit.
* Please note that there are possibilities of individual differences in a color tone on display devices such as LEDs, fluorescent display tubes and LCDs due to manufacturing process or production lots.

Structure of product code

F325 □ □ □ □ □
① ② ③ ④ ⑤

① Standard unit

② I/O input

Sign	Input type
Standard	Volt-free contact input
DCI	Voltage input

③ Power supply

Sign	Power supply
Standard	AC 100 to 240 V (Free)
DC	DC 12 to 24 V

④ Interface (Standard)

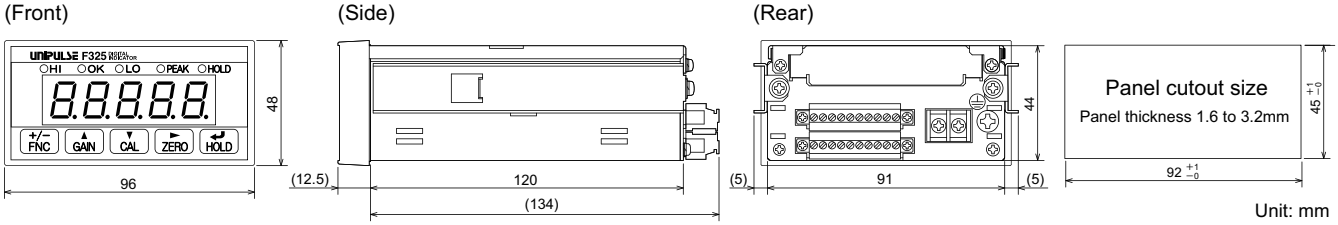
Sign	Interface
Standard	RS-485 (Modbus-RTU /UNI-format)
SIF	SI/F

⑤ Interface (Option)

Sign	Interface
BCO	BCD output (Sink type)
BSC	BCD output (Source type)
DAV	D/A converter (Voltage)
DAI	D/A converter (Current)
232	RS-232C

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

External dimension



Unit: mm