F701-S

GLOBAL STANDARD MODEL
HIGH PERFORMANCE DESIGN
WEIGHING INDICATOR



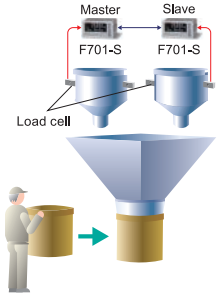
CC-Link DeviceNet PROFIBUS

OIML DIN 192×96 RoHS2 WATER&DUST PROOF

- Ample sequencing functions for feeding, discharging, and bagging weighing

Feeding/Discharging weighing control function
Equipped with various sequences that can directly control charge gates and discharge gates from this unit by just giving a weighing command.

Bagging weighing control function
Equipped with convenient functions for bagging such as Bag Clamp signal output, dual-alternate-discharge function.



- Code memory and Accumulation function
  Up to 8 sets of parameters (e.g. FINAL) can be stored.
  A unit can handle 8 types of material mixing control and accumulation record.
- Digital low pass filter
  High-speed, high-accuracy measurement is achieved because strong in the external vibration.
- High-speed sampling and high resolution
  With the capacity of high-speed AID conversion of 300 times/sec. and high-speed digital processing, a display resolution of 1/10000 is assured across an entire input range. 1/6000 (when OIML R76-1-compliant)
- DIN-size 192 x 96 for easy installation
- Selectable from Sink type and Source type.
  Type of external I/O signal: Sink type / Source type selectable.
- Various interfaces
  Standard built-in RS-485
  (Selectable from Modbus-RTU and original format.)
  CC-Link, DeviceNet, PROFIBUS-DP, BCD, DAC, RS-232C are available as options.
- Free power; 100 to 240 V AC is supportable without switching.

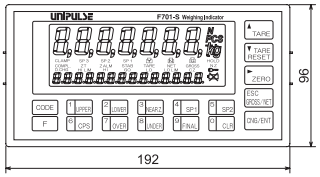
Specifications

Analog	Excitation voltage	DC 5 V±5% Output current: Within 90 mA Ratio metric type (Up to six 350 Ω load cells can be connected in parallel.)
	Signal input range	−0.5 to +3.0 mV/V 0 to 3.0 mV/V (when OIML R76-1-compliant)
	Zero adjustment range	Automatic adjustment by digital operation −0.2 to +2.0 mV/V, 0 to 2.0 mV/V (when OIML R76-1-compliant)
	Span adjustment range	Automatic adjustment by digital operation 0.3 to 3.0 mV/V, 0.6 to 3.0 mV/V (when OIML R76-1-compliant)
	Minimum input sensitivity	0.15 μV/count, 0.5 μV/count (when OIML R76-1-compliant)
	Accuracy	Non-linearity: Within 0.01% FS Zero drift: 0.025 μV/℃ RTI typ. Gain drift: 1 ppm/℃ typ.
	A/D converter	Conversion rate: 300 times/sec. Conversion resolution: 24 bit (binary)
Display	Display	18.5 mm in character height, Numerical display on LCD (7 digits) Sub display: 7.3 mm in character height (14 digits)
	Indicated value	5 digits sign: negative display at the highest digit
	Accumulation value	9 digits * This can be changed to "Accumulation count (4 digits)", "Final (5 digits)", "Code (1 digit)", "Total discharge count (6 digits)" and "Discharge count (5 digits)".
	Display frequency	Selectable from 1, 2, 5, 10, and 20 times/sec. (System speed is 300 times/sec.)
	Status display	CLAMP/ SP3/ SP2/ SP1/ HOLD COMPL./ ZT/ ZALM/ STAB/ TARE/ NET/ GROSS/ NZ D.CHG/ HI LIM/ HI/ GO/ LO/ LO LIM/ CZ/ LOCK
External signal	You can specify whether Sink type or Source type when order the F701-S.	
	Output signal (16 points)	SP1/ SP2/ SP3/ Complete/ Discharge/ Bag clamp/ Error selection 1,2/ Output selection 1 to 6/ Reserve 1,2 At signal ON, output transistor ON. * External voltage must be prepared separately by customer.
	Input signal (16 points)	Operation permission/ Weighing start/ Stop/ Discharge command/ Manual discharge/ Discharge gate open/ Accumulation clear/ Input selection 1 to 6/ Code 1,2,4 Contact (relay, switch etc.) or non-contact (transistor, open collector etc.) can be connected. * External voltage must be prepared separately by customer.
Interface	485 : RS-485 communication interface (Selectable from Modbus-RTU and original format) CCL : CC-Link interface (Option) ODN: DeviceNet interface (Option) PRF : PROFIBUS interface (Option) * PROFIBUS-DPV0 BCO: BCD parallel data output interface (Sink type) (Option) BSC : BCD parallel data output interface (Source type) (Option) DAC : D/A converter (Option) 232 : RS-232C communication interface (Option)	
General specification	Power supply voltage	AC 100 to 240 V (+10%−15%) (Free power source 50/60 Hz)
	Power consumption	3 W typ.
	Inrush current	2 A, 3 msec: AC 240 V average load condition (cold start at room temperature)
	Operating conditions	Operation temperature: −10 to +40℃ Storage temperature: −20 to +85℃ Humidity: 85% RH or less (non-condensing)
	Dimension	192(W) × 96(H) × 140(D) mm (Not including projections)
	Weight	Approx. 2 kg
Attachments	AC input cord (Nominal rating 125 V) 2 m ...1 Load cell connector .....1 Load cell connector rubber .....1 External I/O signal connector .....1 Rubber packing 1	Operation manual .....1 BCD output connector (with BCD output option) ....1 DeviceNet connector (with DeviceNet option) .....1 CC-Link connector (with CC-Link option) 1
Optional accessories	CAAC2P-P2: AC input cord 2 m (Same as the attachment) CAAC3P-P2: AC input cord 2 m CAAC3P-CEE7/7-P1.5: AC input cord (voltage resistance: 250 V) 1.5 m CA4131: (6-wired) cable with connector at one end 3 m CA4230: PRC (6-wired) conversion relay cable 0.3 m CA4311: PRC (6-wired) conversion relay cable (4-wired to 6-wired) (for 520A use) 1 m CN3P-2P: 3P-2P converter plug for AC input cord CN10: Load cell connector (Same as the attachment) CN34: D-Sub9p connector for RS-232C CN51: BCD output connector CN52: FCN series I/O connector (with cover)(Same as the attachment) CN57: FCN series I/O connector (with diagonal cover) CN71: CC-Link connector CN72: Double row connector for CC-Link CND01: DeviceNet connector	

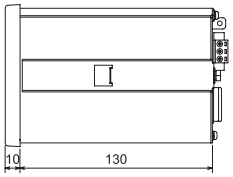
* Please note that there are possibilities of individual differences in a color tone on display devices such as LEDs, fluorescent display tubes and LCDs due to manufacturing process or production lots.

External dimension

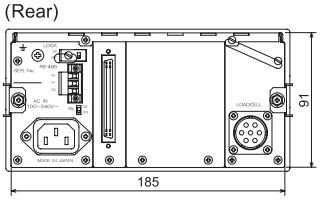
(Front)

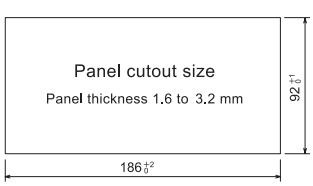


(Side)



(Rear)





Unit: mm

Structure of product code

F701-S ① □ ② □□□ ③

① Standard unit

② External signal

Sign	External signal
SI	Sink type
SO	Source type

③ Interface

Sign	Interface	
Standard	RS-485	

↓ 3 optional interface can be added in addition to the standard interface.

CCL	CC-Link	*
ODN	DeviceNet	*
PRF	PROFIBUS	*
BCO	BCD output (Sink type)	
BSC	BCD output (Source type)	
DAC	D/A converter	
232	RS-232C	

*Only one option is avalable.