

Weight Indicator X2

Table top and panel version



! Features

- High-speed conversion with response times from 5 ms
- Fast calibration by load or mV/V
- Serial Interface RS232, RS485 for Printer, Remote Display, Modbus RTU
- 3 digital In- and 3 outputs for limit function
- Back-lighted, easy readable LCD-display
- Different mounting possibilities for every application

! Optional Interfaces

- Analog output, 0/4-20 mA, 0-10 V_{DC}
- Fieldbus: Profibus-DP, DeviceNet, Ethernet/IP and Profinet



The X2 Weight Indicator provides an easy and reliable solution for process vessel scales with strain gauge load cells in process automation applications.

Reliable indicator for weighing & process automation

- ! The flexibility of the instrument with different options such as serial and digital interfaces or fieldbus allows simple integration into automation systems.
- ! The X2 Weight Indicator is available in a robust aluminium housing for front panel mounting and stainless steel housing for field and table top mounting.
- ! The LCD weight display is back-lighted and allows a good readability even under difficult conditions. 3 freely configurable digital in- and outputs can control simple process functions.
- ! The sense-amplifier supports 4 and 6 wire Load Cells and allows connections over long distances without losing accuracy. The fully galvanically isolated sensor input circuit and supply from supply voltage and all in-/output circuits guarantee additional security.

The right solution for all of these applications:



Weighing



Fill quantity
control

Technical data

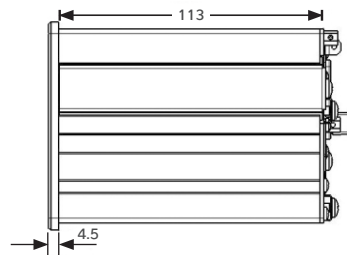
Weight Indicator X2			
Power supply AC version	Supply voltage	100 V – 240 V AC, +10%/–15%, 50/60 Hz	
	Max. power consumption	16 VA/8 W	
Power supply DC version	Supply voltage	24 V DC ± 20%	
	Max. power consumption	8 W	
Environmental conditions	Ambient temperature for table top version	–10 ... +40 °C	
	Ambient temperature for panel version	–10 ... +50 °C	
	Storage temperature	–20 ... +70 °C	
	Humidity	<95%, no condensation (acc. to IEC 68–2)	
Accuracy and stability	Linearity error	<0.003%	
	Zero stability error (Tk0)	<0.05 µV/K RTI 0.004% / 10K at 1m V/V	
	Span stability error (TKSpn)	<2.5 ppm/K	
Sensitivity	Sensitivity	0.2 µV/d recommended 6000d	
	Input voltage (input signal + dead load)	0 ... Max. 36 mV DC, symmetrical to 0	
	Dead load range	36 mV DC (max. input signal)	
Display	6-digit 7-segment LCD		
	Display with orange backlight		
Operating keys	Setup Key, Tare Set/Reset, Gross, Zero, Print & Test key		
Load cell input	Load cell type	Strain gauge, 6- or 4-wire connection possible	
	Supply voltage	12 V DC	
	Impedance	for up to 8 load cells of 650 Ω each or 4 load cells of 350 Ω each	
	Max. load	≥ 75 Ω	
Measuring time	Configurable	5, 10, 20, 40, 80, 160, 320, 640, 960, 1200, 1600 ms	
	Filter	Selectable, 4th order (low-pass), with configurable cut-off frequency	
	Characteristic	Bessel, Aperiodic, Butterworth, Tschebyscheff	
Housing Panel mount version	Dimensions	W 163 × H 89.5 × L 113 mm	
	Weight	Net	1.15 kg
		Delivery	2.0 kg
	Material	Aluminium	
Housing Table top version	Dimensions	W 197 × H 122.5 × L 232 mm	
	Weight	Net	2.8 kg
		Delivery	3.2 kg
	Material	Stainless Steel	
Integrated interfaces	Serial interface RS232, RS485 protocol for printer, remote display, Modbus RTU		
	3 digital in- and outputs for scale, limit function and status signals		

Technical diagrams

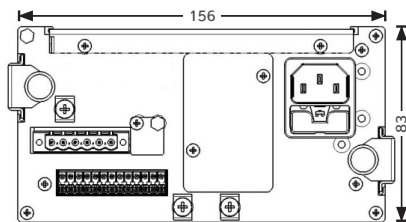
Panel Version



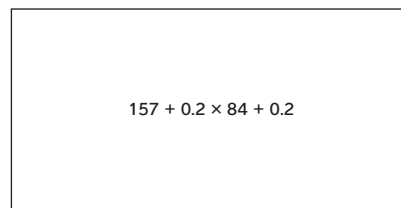
Front view *



Side view *



View from the back *



Panel cut-out *

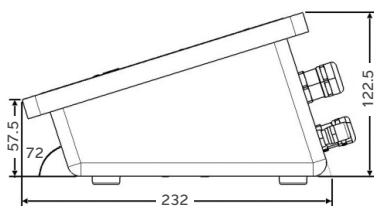
Table Top/Wall Mount Version



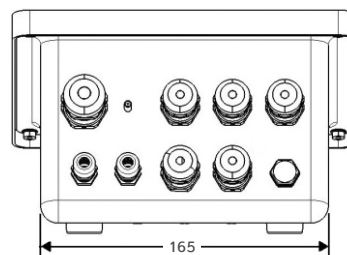
Front view *



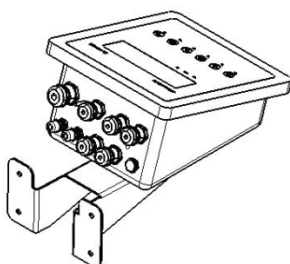
Isometric view



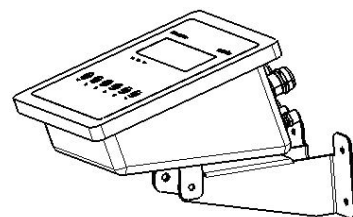
Side view *



View from the back *



Wall Mounting Accessories



* Dimensions in mm

Ordering information

Weight Indicator X2		
Type	Description	Order number
Panel versions		
PR 5310/00	Basic, 230V AC	9405 153 10001
PR 5310/01	Basic, 24V DC	9405 153 10011
PR 5310/20	Basic, Analog Out, 230V AC	9405 153 10201
PR 5310/21	Basic, Analog Out, 24V DC	9405 153 10211
PR 5310/23	Basic, Profibus & Analog Out, 230V AC	9405 153 10231
PR 5310/24	Basic, Profibus & Analog Out, 24V DC	9405 153 10241
PR 5310/40	Basic, Profibus, 230V AC	9405 153 10401
PR 5310/41	Basic, Profibus, 24V DC	9405 153 10411
PR 5310/60	Basic, DeviceNet, 230V AC	9405 153 10601
PR 5310/61	Basic, DeviceNet, 24V DC	9405 153 10611
PR 5310/80	Basic, Ethernet/IP, 230V AC	9405 153 10801
PR 5310/81	Basic, Ethernet/IP, 24V DC	9405 153 10811
PR 5310/83	Basic, Profinet, 230V AC	9405 153 10831
PR 5310/84	Basic, Profinet, 24V DC	9405 153 10841
Table top versions		
PR 5310/10	Basic, 230V AC	9405 153 10101
PR 5310/11	Basic, 24V DC	9405 153 10111
PR 5310/30	Basic, Analog Out, 230V AC	9405 153 10301
PR 5310/31	Basic, Analog Out, 24V DC	9405 153 10311
PR 5310/33	Basic, Profibus & Analog Out, 230V AC	9405 153 10331
PR 5310/34	Basic, Profibus & Analog Out, 24V DC	9405 153 10341
PR 5310/50	Basic, Profibus, 230V AC	9405 153 10501
PR 5310/51	Basic, Profibus, 24V DC	9405 153 10511
PR 5310/70	Basic, DeviceNet, 230V AC	9405 153 10701
PR 5310/71	Basic, DeviceNet, 24V DC	9405 153 10711
PR 5310/90	Basic, Ethernet/IP, 230V AC	9405 153 10901
PR 5310/91	Basic, Ethernet/IP, 24V DC	9405 153 10911
PR 5310/93	Basic, Profinet, 230V AC	9405 153 10931
PR 5310/94	Basic, Profinet, 24V DC	9405 153 10941
Accessories		
PR 5310/99	Wall mounting accessory	9405 353 10991

The products and solutions presented in this data sheet make major contributions in the following sectors:



Food and beverages



Pharmaceutical



Chemistry



Agribusiness



Cosmetics



Building materials



Machinery (OEM)

The technical data given serves as a product description only and should not be understood as guaranteed properties in the legal sense.

Specifications subject to change without notice.
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