Minebea intec
The true measure

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.

Technical data

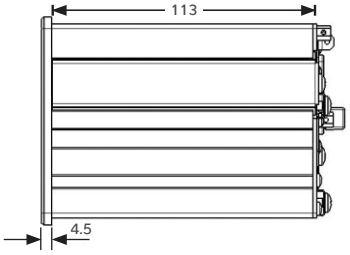
Weight Indicator X2

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	

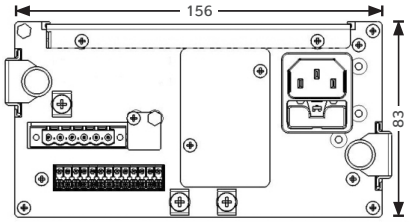
Technical diagrams

Panel Version

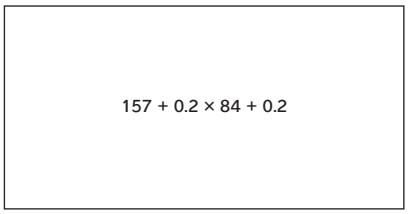
Front view *



Side view *



View from the back *

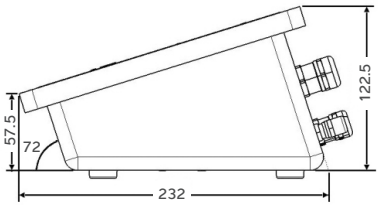


Panel cut-out *

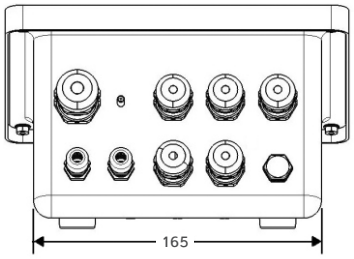
Table Top/Wall Mount Version

Front view *

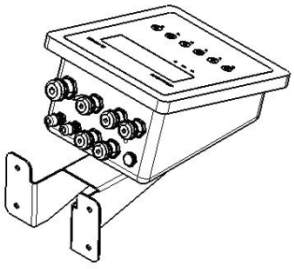
Isometric view



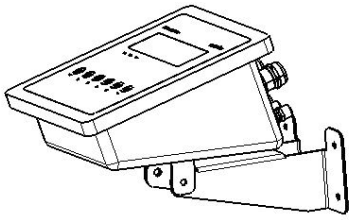
Side view *



View from the back *



Wall Mounting Accessories



* Dimensions in mm

Ordering information

Weight Indicator X2

Type	Description	Order number
Panel versions		
PR 5310/01	Basic, 24V DC	9405 153 10011
PR 5310/21	Basic, Analog Out, 24V DC	9405 153 10211
PR 5310/24	Basic, Profibus & Analog Out, 24V DC	9405 153 10241
PR 5310/41	Basic, Profibus, 24V DC	9405 153 10411
PR 5310/61	Basic, DeviceNet, 24V DC	9405 153 10611
PR 5310/81	Basic, Ethernet/IP, 24V DC	9405 153 10811
PR 5310/84	Basic, Profinet, 24V DC	9405 153 10841
Table top versions		
PR 5310/11	Basic, 24V DC	9405 153 10111
PR 5310/31	Basic, Analog Out, 24V DC	9405 153 10311
PR 5310/34	Basic, Profibus & Analog Out, 24V DC	9405 153 10341
PR 5310/51	Basic, Profibus, 24V DC	9405 153 10511
PR 5310/71	Basic, DeviceNet, 24V DC	9405 153 10711
PR 5310/91	Basic, Ethernet/IP, 24V DC	9405 153 10911
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:

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Minebea Intec GmbH
Meiendorfer Straße 205 A
22145 Hamburg, Germany

Phone +49.40.67960.303

sales.hh@minebea-intec.com
www.minebea-intec.com