This document will soon proudly feature our new brand & design – Minebea Intec

sartorius mechatronics

X1
Digital Process Indicator

- Full Digital Signal Processing with a resolution of 7,500 div.
- Direct calibration and configuration via front keys
- Self-testing functions
- LED display, 6 digits, 7 segments
- Serial RS232 built in
- Supply voltage 230 V
- Protection class of front IP 65
- Option:
  - analog output 0/4... 20 mA
  - 2 relais outputs for limit control
  - serial interface RS485

Product Profile
The X1 process indicator is particularly suited for industrial weighing applications such as platforms, silos and weighbridges.

Operating is made via front panel. The X1 process indicator is available in a robust aluminium housing for front panel mounting.

Utmost interference suppression and long-term stability guarantees optimum use in harshest environments.

Specific Features
- Easy and comfortable operation, calibration and configuration routines
- Calibration without weights (input of load cell identification data)
- Automatic zero tracking
- HW options extendable later on

The red LED weight display with 15 mm characters allows a good readability even under difficult Conditions.

The Sense-amplifier supports 4 and also 6 wire Load Cells. This allows connections over long distances without losing accuracy.

Printout
The printout can be configured.

The following values are available:
- Gross weight
- Net weight
- Tare weight
- Date and time
- Sequence number
- Indicator adress

Input signal filter
Intelligent first order low pass filter to suppress unwanted signal deviation caused by external disturbances. Adjustable time constant and tolerance band. Signal changes that exceed the set tolerance band will by-pass the filter directly for speedy response.

Technical Data

Load cell supply
8,5 VDC +/- 10%,
Strain gauge technology,
6 or 4-conductor connection
75 Ω max. load
=> max. 4 Load cells 350 Ω each

Resolution:
7,500 Divisions
Not W&M approved
Min. measuring signal: 1.5 µV/d
Measuring time: 50 ms

Display
The LED Display allow the indication of the weight and the full operation of the instrument.
Status LEDs inform about the system status and weight unit.

Standard RS232 Interface
For the connection of a printer or a remote display
Connector:
9-contact D-Sub female

Options:
PR 5301/04
Serial I|O and Analog Output
2 Connectors:
9-contact D-Sub female

Serial I|0:
Type: RS485 full duplex
Remote Display protocol

Analog output:
Output: Gross weight
Range: 0/4...20 mA, configurable
Resolution: 16 bits

PR 5301/15 Relay Output Card
Connector:
7-contact plug-in screw terminals
Number of relays: 2
Type: Change-over contact, electrical isolated for max. 2.5 mm²
Contact load:
0.5 A @ 24 VAC
0.5 A @ 32 VDC
Function:
Limits on gross weight

Power supply
Voltage: 100 V...240 V AC
50/60 Hz, 21 VA

Circuits
All fully galvanically isolated from input and supply.

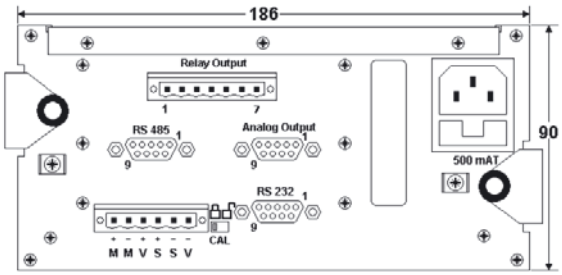
Environmental conditions
Temperature
Operation: -10... +50 °C
Power-On: >0 °C
Storage: -20... +70 °C
Humidity: 95 %, no condensation

Protection class
Front: IP65
Housing: IP30

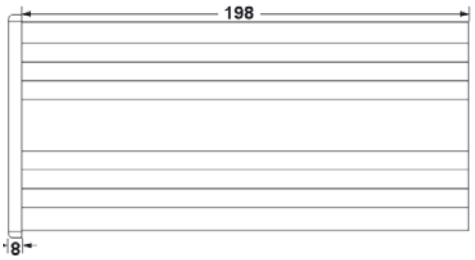
Dimensions
Width: 192 mm
Height: 96 mm
Depth: 208 mm

Weight
2.0 kg net
2.5 kg gross

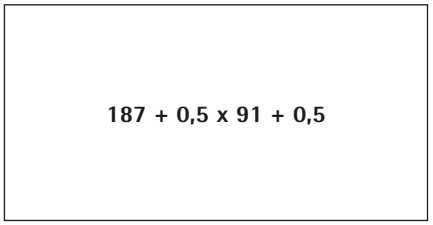
front view*



rear view*



side view*



panel cut out*

* Dimensions in mm

Order information

Type	Description	Order number
PR 5301/00	Digital Process Indicator 230 V	9405 153 01001
Options		
PR 5301/04	Serial RS485 and Analog Output 0/4-20 mA	9405 353 01041
PR 5301/15	2 Relay Outputs	9405 353 01151

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