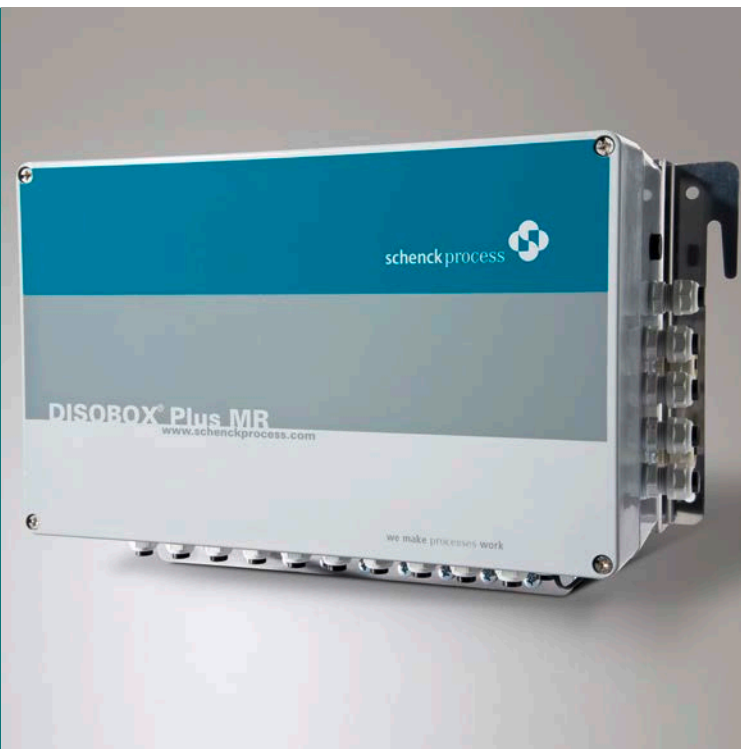


## A/D Converter DISOBX® Plus MR



- On-site weighing electronics - IP66
- Optimized for Schenck Process dynamic train scales
- Individual sensors directly connected
- Digital transmission of measured values
- Active electronics replacement with no readjustment or recalibration
- Overvoltage protection

### Application

The DISOBX Plus MR is a multichannel on-site analog-digital converter for Schenck Process dynamic train scales.

The output signal of each connected channel is digitized separately. This gives an expanded range of analysis possibilities when servicing.

### Equipment

The DISOBX Plus MR has 8 measuring channels and has been designed for direct connection of the sensors.

Each channel has its own high-resolution analog/digital converter (not a multiplexer).

The integrated I/O signals allow direct connection of signal lights, track switchers or pushbuttons.

The protection concept for over-voltage has been designed for use on rails and exceeds the demands of EN 50122-1.

### Communication

The integrated Ethernet interface can be used to configure the device as well as to operate it. Connections are available for fiber optics, a further device and a service PC.

### Adjustment and Calibration

The configuration program DISOPLAN® is used to configure the device. It allows access to all of the device parameters and can indicate weight values if required. Furthermore, the complete status of a DISOBX Plus MR can be read out or loaded (backup and restore).

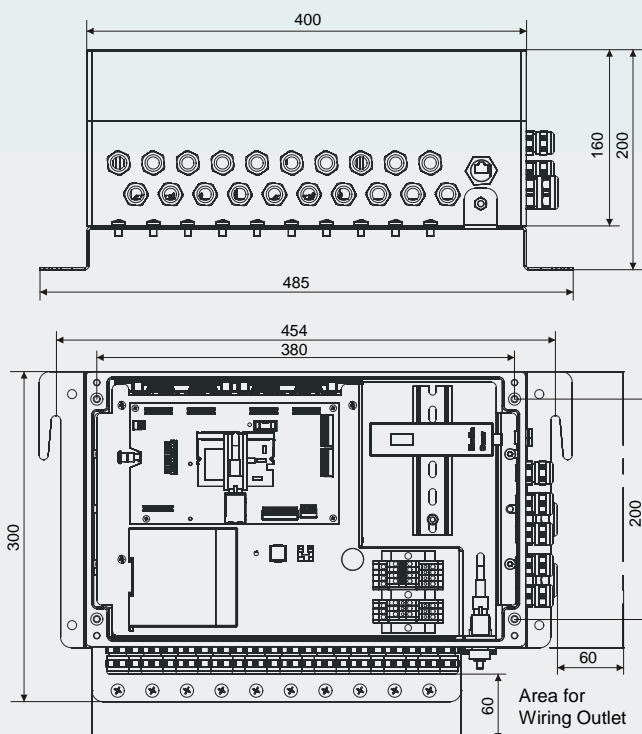
The DISOBX Plus MR has an EC Type-examination Certificate for a legal-for-trade weighing system as well as a Certificate of Conformance (CoC) from the National Conference on Weights and Measures (NCWM) for legal-for-trade applications in the USA.

### Technical Data

Processor	ARM-9
RAM	32 MB
Flash	16 MB
EEPROM	16 kB
Clock	Real-time clock, 2 weeks buffer
Display and keyboard	None
The housing	On-site, protection class IP66
No. of measuring channels	8 for connecting up to 4 measuring eyes and 8 weighing sleepers
Load cell power supply	5 V AC
Scan rate	130/s per measuring channel (160/s for 60 Hz Mains voltage)
Connections	4-wire
Minimal signal voltage	$0.5 \mu\text{V/d} \times \sqrt{n}$ n: the number of the measuring channels per scales
Number of digits in legal-for-trade operation	$N \leq 10\,000\text{ d}$
Linearity error	$<0.05\text{ ‰}$
Zero point stability, $TK_0$	$<0.6 \mu\text{V} / 10\text{ K}$ $<0.03\text{ ‰} / 10\text{ K}$ based on the max. input voltage
Range error, $TK_c$	$<0.03\text{ ‰} / 10\text{ K}$
Compound error $F_{\text{comb}}$	$<0.08\text{ ‰} / 10\text{ K}$
Operating temperature range legal-for-trade	$-30\text{ °C} \dots +50\text{ °C}$ (EU) $-10\text{ °C} \dots +40\text{ °C}$ (USA)
Storage temperature	$-30\text{ °C} \dots +60\text{ °C}$
Interface	1x RJ45 (10/100BASE-TX) for servicing 1x fiber optic cable for connecting the weighing PC
Weight	11.6 kg
Test certificate number (EU)	D09-10.21
Certificate of Conformance (USA)	09-048

Delivery item	Material number
Basic model DISOBOX Plus MR incl. 230 V/24 V power supply unit and fiber optic connection	V081126.B01
<b>Accessories</b>	
Relay board VEA8020	V081113.B01
Namur converter for track switcher, 1 channel	V087369.B01
Overvoltage protection 230 V	V012098.B02
Overvoltage protection 24 V	V032811.B01 V022717.B02
<b>Spare parts</b>	
Power supply unit DN-60-24	V126569.B01
Terminal board VKE1082	V081118.B51
Processor board VFE1000	V081012.B51
Measuring module VME1000	V081022.B01
JetNet fiber optic media converter Temperature range $-10\text{ °C} \dots +60\text{ °C}$ expanded to $-40\text{ °C} \dots +75\text{ °C}$	V079503.B04 on request

Dimensions:



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