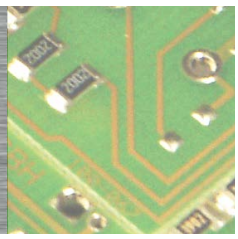
Honeywell

PCD3.W220

Analog input module, 8 channel, 10 bit, Pt / Ni1000



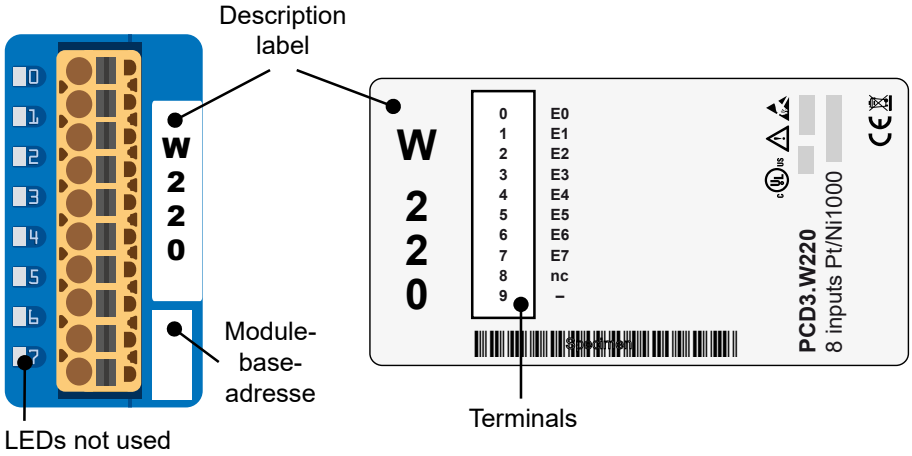
Description

With its short conversion time of <50 µs, this module is universally suitable for recording analogue signals.
The only limitations are with weak signals, as with Pt100 resistive temperature sensors, or with thermocouples.

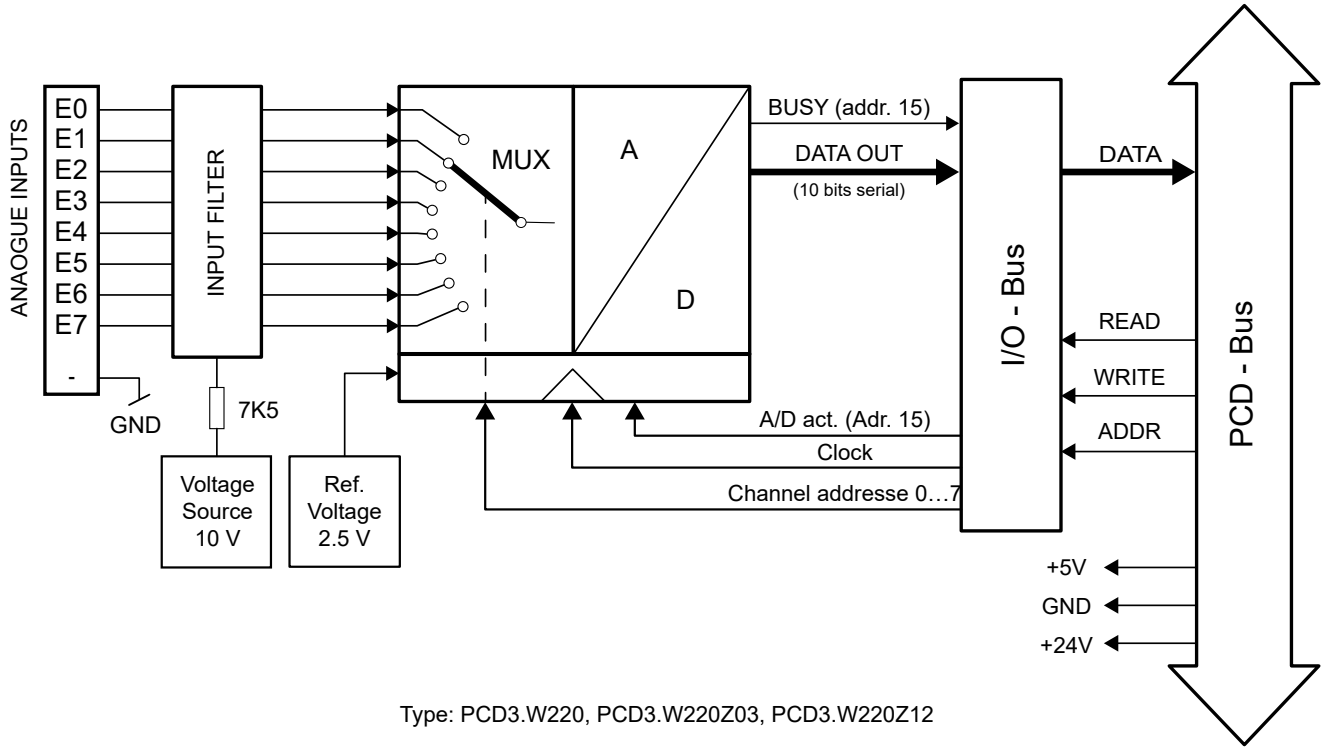
PCD3.W220

Technical specifications	
Number of inputs (channels)	8
Signal range	Pt / Ni1000
Resolution (representation)	10 bit (0 … 1023)
Galvanic separation	no
Measuring principle	non-differential, single-ended
Input resistance	7.5 kΩ / 0.1 %
Accuracy (of measured value)	± 3 LSB
Repeating accuracy (under same conditions)	within 1 LSB
Temperature error (0 … +55 °C)	± 0.3 % (± 3 LSB)
Conversion time A/D	≤ 50 µs
Overvoltage protection	± 50 VDC
Burst protection (IEC1000-4-4)	± 1 kV, with unshielded cables ± 2 kV, with shielded cables
Time constant of input filter	typisch 10 ms
Internal current consumption (from +5 V bus)	8 mA
Internal current consumption (from V+ bus)	16 mA
External current consumption	0 mA
Terminals	Pluggable 10-pole spring terminal block for Ø up to 2.5 mm², plug type A

Indicators and connections



Block diagram

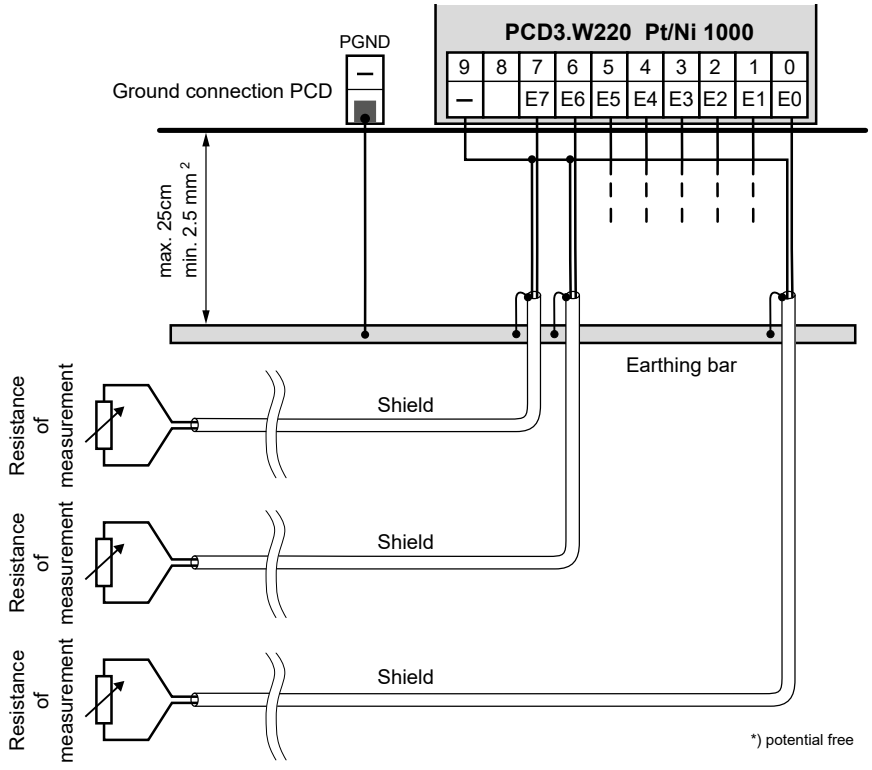


Type: PCD3.W220, PCD3.W220Z03, PCD3.W220Z12

Connection concept for Pt / Ni1000

The voltage input signals are connected directly to the 10-pole terminal block (E0 … E7 and COM). To minimize the amount of interference coupled into the module via the transmission lines, connection should be made according to the principle explained below.

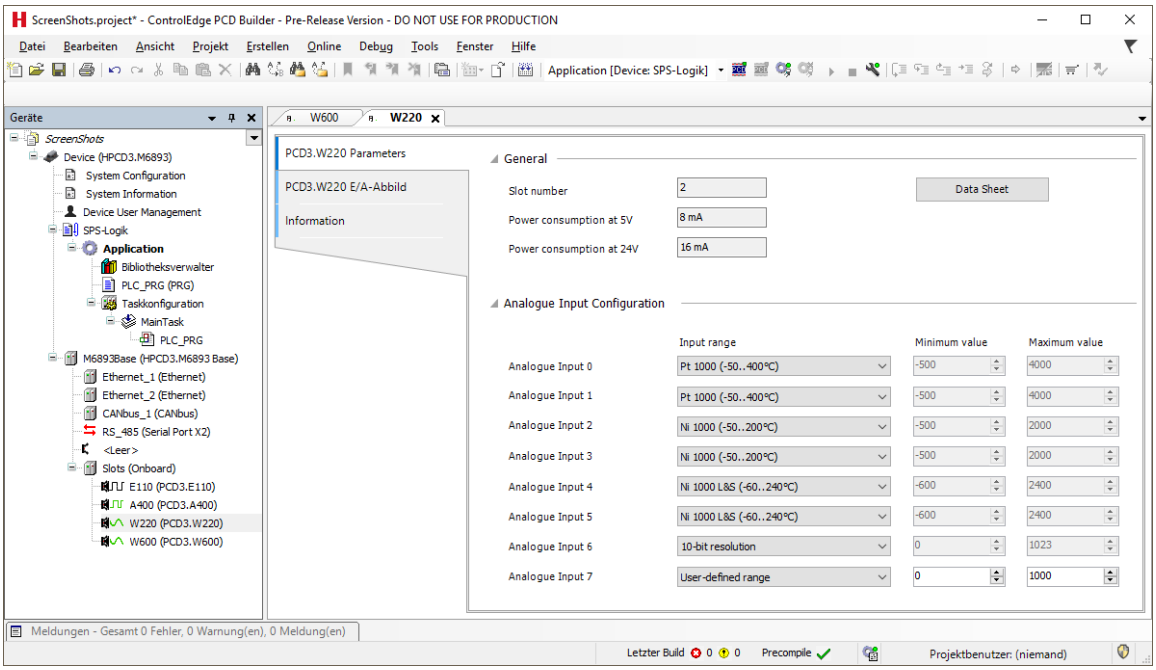
Connection for Pt / Ni1000



!	The reference potentials of signal sources should be wired to a common GND connection (“–” and “COM” terminals). To obtain optimum measurement results, any connection to an earthing bar should be avoided.
!	If shielded cables are used, the shielding should be connected to an earthing rail.
!	Input signals with incorrect polarity significantly distort the measurements on the other channels.

Configuration

HPS ControlEdge PCD Builder	
HPCD-System	**Evaluation**
HPCD3.M6893	The evaluation is performed by the firmware. It reads the values according to the configuration (Device Configurator)



I/O modules and I/O terminal blocks may only be plugged in and removed when the Control Edge PCD and the external +24 V are disconnected from the power supply.

PCD3.W220

4 405 4954 0

Ordering information

Type	Short description	Description	Weight
PCD3.W220	8 analogue inputs Pt / Ni1000, 10 bit	Analogue input module, 8 inputs (channels), resolution 10 bit, signal range Pt / Ni1000, (the channels themselves not separated), connection with pluggable spring terminals, plug-in type A (4 405 4954 0) included	80 g

Ordering information equipment

Type	Short description	Description	Weight
4 405 4954 0	Plug-in, type A	Plug-in I/O spring terminal block, 10-pole up to 2.5 mm², labelled 0 … 9	15 g

ATTENTION

These devices must only be installed by a professional electrician,
otherwise there is the risk of fire or the risk of an electric shock.

WARNING

Product is not intended to be used in safety critical applications,
using it in safety critical applications is unsafe.

WARNING - Safety

The unit is not suitable for the explosion-proof areas and the areas of use excluded in EN 61010 Part 1.

WARNING - Safety

Check compliance with nominal voltage before commissioning the device (see type label).
Check that connection cables are free from damage and that, when wiring up the device,
they are not connected to voltage.
Do not use a damaged device!

NOTE

In order to avoid moisture in the device due to condensate build-up, acclimatise the device at room temperature for about half an hour before connecting.

CLEANING

The device can be cleaned in dead state with a dry cloth or cloth soaked in soap solution.
Do not use caustic or solvent-containing substances for cleaning.

MAINTENANCE

These devices are maintenance-free.
If damaged, no repairs should be undertaken by the user.

GUARANTEE

Opening the module invalidates the guarantee.

Observe this instructions (data sheet) and keep them in a safe place.
Pass on the instructions (data sheet) to any future user.

WEEE Directive 2012/19/EC Waste Electrical and Electronic Equipment directive
The product should not be disposed of with other household waste. Check for the nearest authorized collection centers or authorized recyclers. The correct disposal of end-of-life equipment will help prevent potential negative consequences for the environment and human health.

EAC Mark of Conformity for Machinery Exports to Russia, Kazakhstan or Belarus.

Sales and Service

For application assistance, current specifications, pricing, or name of the nearest Authorized Distributor, contact one of the offices below.

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WARRANTY / REMEDY
Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is **in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.** Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.
While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications are subject to change without notice.

For more information

Learn more about ControlEdge PCD, visit our website www.honeywellprocess.com/ControlEdgePCD or contact your Honeywell account manager.

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