Data Sheet

Honeywell

PCD3.W300

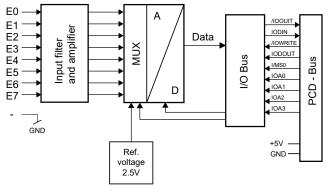
Analog input module, 8 channel, 12 bit, 0 ... 10 V

Modulo di ingresso analogico rapido a 8 canali con risoluzione 0 ... 10 V e 12 bit per canale. L'uso di un microcontrollore veloce a bordo permette il disaccoppiamento e lo sgravio del PCD per quanto riguarda i compiti di calcolo intensivo, come il ridimensionamento e il filtraggio dei dati del segnale.

Technical specifications				
Number of inputs (channels)	8			
Signal range	0 10 V			
Resolution (representation)	12 bit (0 4095)			
Resolution	2.442 mV pro bit			
Galvanic separation	no			
Measuring principle	non-differential, single-ended			
Input resistance	20 kΩ / 0.15 %			
Accuracy at 25 °C	± 0.5 %			
Repeating accuracy (under same conditions)	± 0.05 %			
Temperature error (0 +55 °C)	± 0.2 %			
Conversion time A/D	≤ 10 µs			
Overvoltage protection 1)	± 50 VDC (permanent)			
EMV protection	yes			
Time constant of input filter	typisch 10.5 ms			
Internal current consumption (from +5 V bus)	< 8 mA			
Internal current consumption (from V+ bus)	5 mA			
External current consumption	0 mA			
Terminals	Pluggable 10-pole spring terminal block for Ø up to 2.5 mm², plug type A (4 405 4954 0)			

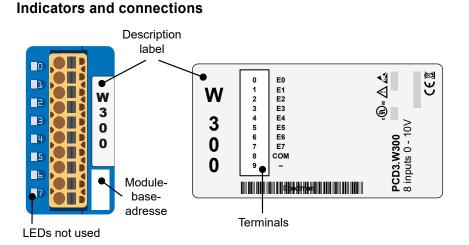


Block schematic



Type: PCD3.W300, PCD3.W310

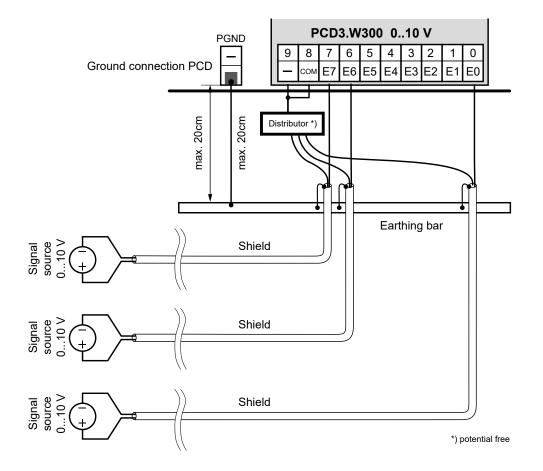
$^{\mathrm{(j)}}$ No negative input voltage should be applied on these modules !



Connection concept for voltage inputs

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.

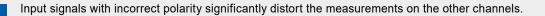
Connection for 0 ... 10 V



No negative input voltage should be applied on these modules.

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.





Galvanic separation of inputs to CPU, channels themselves not separated.

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



PCD3.W300



4 405 4954 0

Ordering information				
Туре	Short description	Description	Weight	
PCD3.W300	8 analogue inputs 0…10 V, 12 bit	Analogue input module, 8 inputs (channels), resolution 12 bit, signal range 010 V, (the channels themselves not separated), connection with pluggable spring terminals, plug-in type A (4 405 4954 0) included	100 g	

Ordering information equipment				
Туре	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 EN61010 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 during, 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.

ASIA PACIFIC

Honeywell Process Solutions, (TAC) <u>hfs-tac-support@honeywell.com</u>

Australia

Honeywell Limited Phone: +(61) 7-3846 1255 FAX: +(61) 7-3840 6481 Toll Free 1300-36-39-36 Toll Free Fax: 1300-36-04-70

China – PRC - Shanghai

Honeywell China Inc. Phone: (86-21) 5257-4568 Fax: (86-21) 6237-2826

Singapore

Honeywell Pte Ltd. Phone: +(65) 6580 3278 Fax: +(65) 6445-3033

South Korea

Honeywell Korea Co Ltd Phone: +(822) 799 6114 Fax: +(822) 792 9015

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 <u>www.honeywellprocess.com/ControlEdgePCD</u> or contact your Honeywell account manager.

Honeywell Process Solutions

2101 CityWest Blvd, Houston TX 77042 Honeywell House, Skimped Hill Lane Honeywell

Bracknell, Berkshire, England RG12 1EB UK ©2020 Honeywell International Inc. Building #1, 555 Huanke Road,

Zhangjiang Hi-Tech Industrial Park, Pudong New Area, Shanghai 201203 Document No.: 51-52-03-81 Rev.3.0 June 2020

EMEA

Honeywell Process Solutions, Phone: +80012026455 or +44 (0)1344 656000

Email: (Sales) <u>FP-Sales-Apps@Honeywell.com</u> or (TAC) <u>hfs-tac-support@honeywell.com</u>

AMERICA'S

Honeywell Process Solutions, Phone: (TAC) 1-800-423-9883 or 215/641-3610 (Sales) 1-800-343-0228

Email: (Sales) <u>FP-Sales-Apps@Honeywell.com</u> or (TAC) <u>hfs-tac-support@honeywell.com</u>