

Printer Communication Controller
PCC 400-C



Installation Guide

only valid in combination with the user manual

or PCC 400-Batching Master
PCC 400 Pipeline Master

Version 15.4

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Safety information

The personnel for installation, commissioning, diagnostics and maintenance must fulfil the following requirements:

- Trained, qualified specialists must have a relevant qualification for this specific function and task
- Are authorised by the plant owner/operator
- Are familiar with federal/national regulations
- Before beginning work, the specialist staff must have read and understood the instructions in the User Manual and supplementary documentation as well as in the certificates (depending on the application)
- Following instructions and basic conditions

The operating personnel must fulfil the following requirements:

- Being instructed and authorised according to the requirements of the task by the facility's owner-operator
- Following the instructions in these Installing Instructions

Validity of Installation Instructions

- These installation guide apply to all PCC 400-D only in conjunction with the corresponding user manual
PCC 400 Batching Master or
PCC 400 Pipeline Master.
- The software is described in a separate manual for Batching Master or Pipeline Master. Batching Master and Pipeline Master can not be operated simultaneously at one PCC 400.
- Your IBS agent will be able to give you information about any improvements or modifications.
- The manufacturer is not responsible for damage caused by incorrect or unauthorised use. Conversions and changes to the instrument must not be made, otherwise the certification and guarantee become invalid.

The PCC 400 should be operated on an uninterruptible power supply.

Do not turn off the PCC 400 by switching off the power supply.

Please press the power button on the PCC 400 or turn off via the software.



Attention!

After briefly pressing the power button all running programs at the PCC 400 get closed within about 60 seconds and shuts off after further 15 seconds. Don't press the button about more than 1 second, because the PCC 400 then shuts off without previously shut down the operating system. This means that important data and programs could be destroyed on the hard disk.

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1 System description

The PCC 400 is a PC whose software starts automatically after power on. This is adapted to the batch controller Batching Master and is used to print and store metering data.

Other housings (e. g. mini-pc, standard housing, 19"...) and configurations are possible. Only the 'PCC 400 Batching Master' software is described in this manual.

Mixed operation of Batching Master and Pipeline Master at the same PCC 400 is not possible. For the exact software description please refer to the user manual PCC 400-x.

The PCC 400 is a Modbus RTU Master. The Batching Masters are connected by an interface converter to the PCC 400. Intrinsically safe Batching Masters need additional a IPC 300i for safety isolation.

Der PCC 400 arbeitet als 'Modbus RTU Master'. Die Batching Master / Pipeline Master werden über einen RS-232/RS-485-Adapter an den PCC 400 angeschlossen. Eigensichere Batching Master / Pipeline Master werden zusätzlich über die IPC 3x0 i zur sicheren Trennung angeschlossen.

The connection of mouse, keyboard and monitor are recommended.

Power is supplied via an included 100 VAC to 240 VAC power supply or directly through a different VDC power supply.

The PCC 400 should be operated on an uninterruptible power supply. Do not turn off the PCC 400 by switching off the power supply.

The PCC 400 should be operated with an uninterruptible power supply. Do not switch off the PCC 400 by switching off the power supply, but by briefly pressing the off button on the PCC 400 or using the software.



1.1 Password of the system administrator

The PCC 400 system administrator password is "IBSBatchControl" ex works. Please change this password. Open the terminal mode by pressing CTRL, Alt and T simultaneously and type

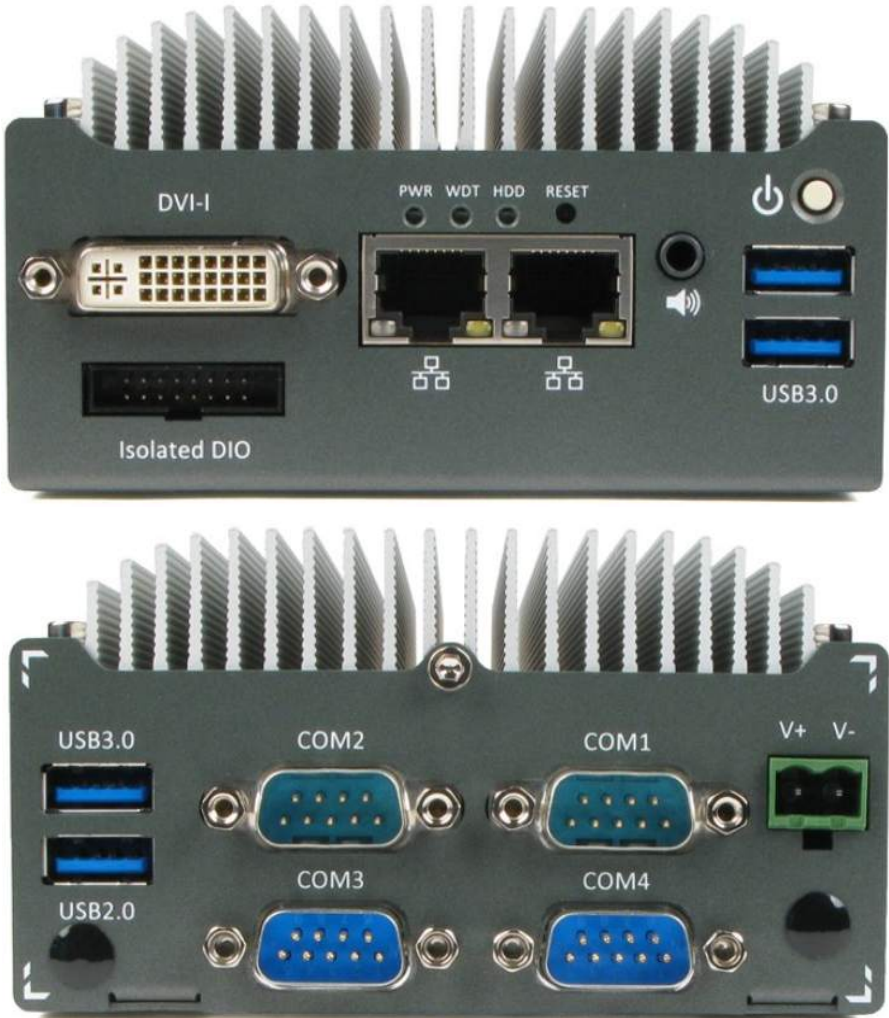
passwd [username].

The username is "pcc" ex works and displayed on the right top. Therefore you enter "passwd pcc" in the terminal. Confirm this with the RETURN key. Please take the further petitions from the terminal window.

2 Assembly and installation

This chapter must be observed during assembly and installation.

2.1 Exterior view



2.2 Protection level IP20

The PCC 400 corresponds to the IP20 protection rating.

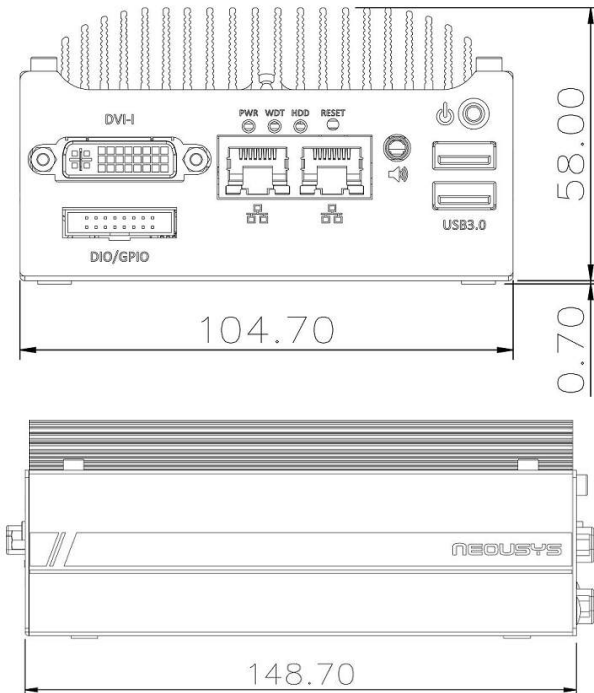
2.3 Temperature range and relative humidity

The PCC 400 may be operated in the range of -30°C to $+70^{\circ}\text{C}$ with SSD and -10°C to 60°C with HDD. The relative humidity must be between 10% and 90%.

2.4 Housing dimensions

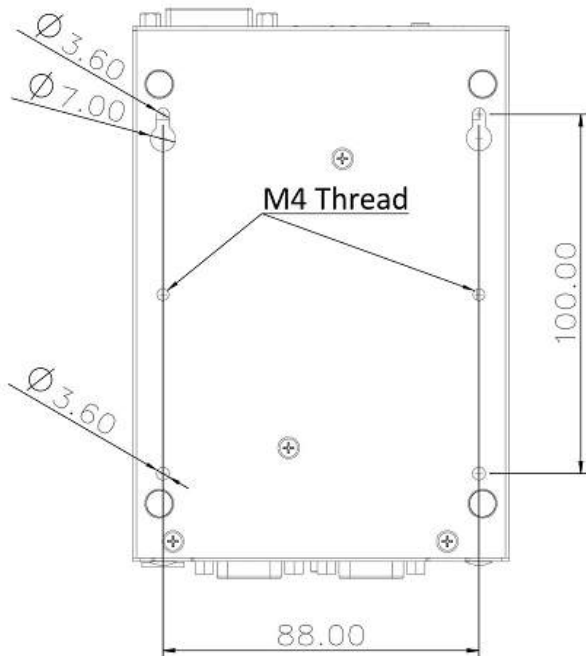
The PCC 400 is delivered in an enclosure (IP20) with the dimensions of 149mm x 105mm x 54mm.

Please refer to the drawings for the exact dimensions and holes. The PCC is build for wall and DIN-rail-mounting (option).

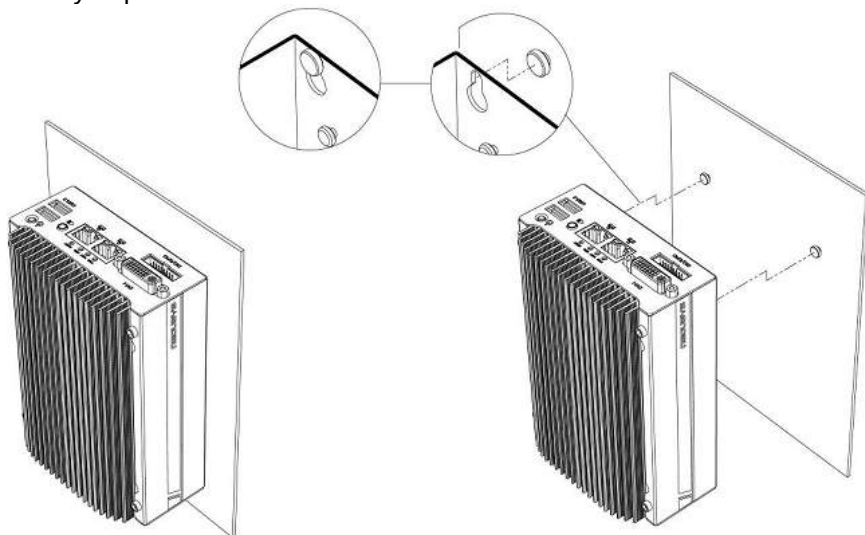


Assembly and installation

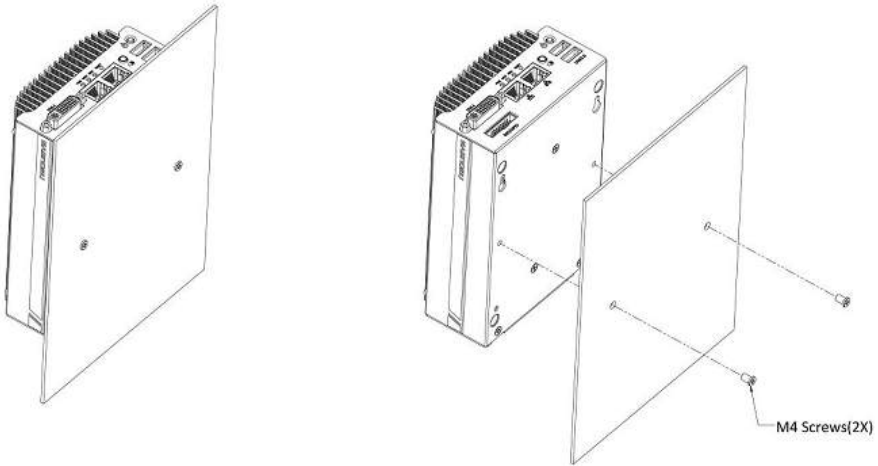
Use the drillings at the bottom side for wall mounting the PCC.



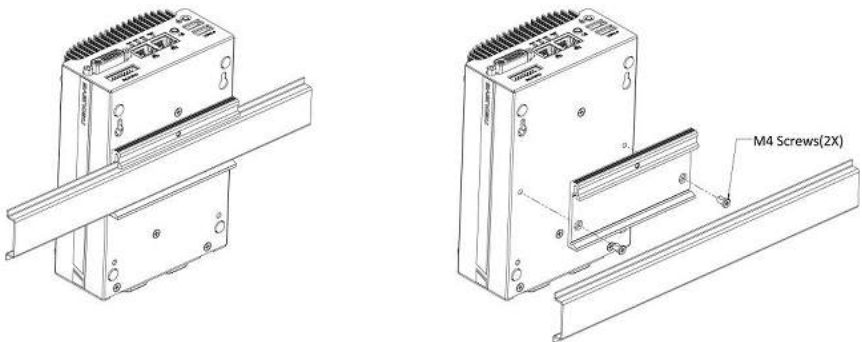
Either you put the PCC on two screws or



fasten it with two M4 screws.



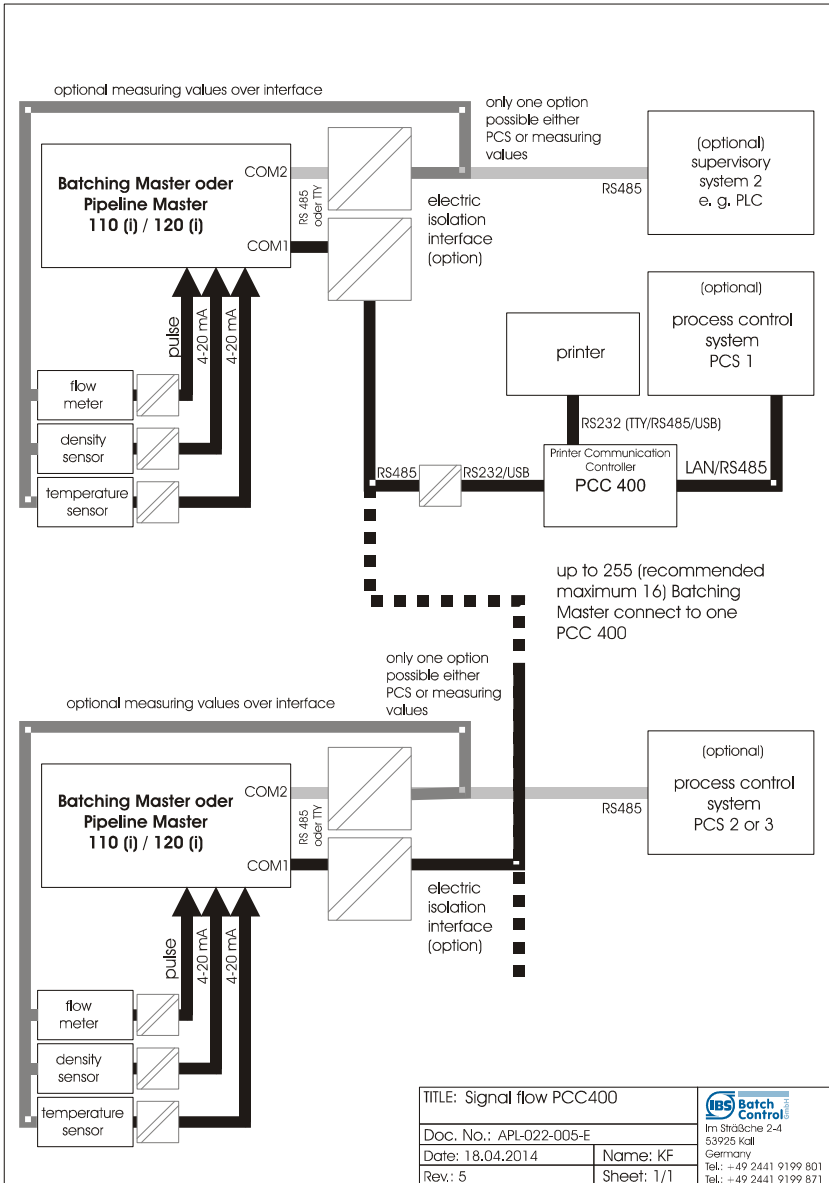
The PC can be fastened with the available accessories also on DIN-rails.



2.5 Installation instructions

Use only shielded cables. The protection shield has to be connected extensive with a shield clamping bracket. The connector housings have to be firmly screwed to the PCC 400.

2.6 Block diagram of custody transfer measuring systems



2.7 Monitor connection



Connect the monitor with a minimum resolution of 1280×1024 pixels to the DVI connector. If there is only a VGA connector at the monitor, please use an adapter.



DVI-to-VGA Adapter



DVI-I to VGA+DVI-D Y-Cable

2.8 Keyboard and Mouse connection

A standard keyboard and a mouse are connected to the USB ports.

2.9 LAN connection

LAN0 from the two available LAN connections is set to the fixed address 192.178.1.77. LAN0 could be used for a VNC-Viewer on an external PC. If you want to connect a laptop to the PCC, set the LAN to a fixed address. LAN1 gets the IP address from a DHCP server.

Other settings can be done in the operating system.

2.10 Voltage connection

The PCC is using a supply from 8 to 35VDC/3A. More than 35V damages the system.

The typical power consumption is 7.68W (0.32A@24V). The maximum power supply is 13.44W (0.56W@24V).



Attention!

Please ensure that the supply will not be switched off before the PCC 400 is shut down.

We recommend to use the optionally available UPS.

2.11 Maintenance-free DC UPS

The optional uninterruptible power supply SITOP UPS500S is mounted on a top hat rail. It has been adjusted by us to the values required for the PCC 400. Since the capacitors of the uninterruptible power supply must be safely charged, it takes a few seconds before the PCC is automatically switched on. The PCC software detects the status of the supply voltage via the USB interface. If this fails, the PCC 400 is immediately shut down safely. The UPS500S stores enough power to safely shut down the PCC.

Before switching on the uninterruptible power supply, make sure that the USB port is plugged into any of the PCC's USB slots. A UPS500S plugged in later is not recognized by the PCC.

Terminal	Description	
X1.1	Power Supply +	24V DC (22-29V)
X1.2	Power Supply -	0V
X1.3	Output Power Supply +	PCC Power Supply V+
X1.5		Internal connected to terminal X1.3
X1.4	Output Power Supply -	PCC Power Supply V-
X1.6		Internal connected to terminal X1.4
X3	USB cable to any USB port of the PCC	

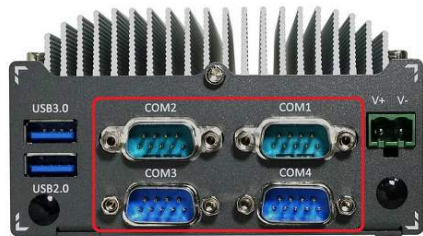
2.12 Dongle for custody transfer seal

After configuring, the dongle is plugged into the interface COM2. When the dongle is plugged the custody transfer relevant settings are fixed and can not be changed. The calibration officials seals the dongle by a seal against pull out.



2.13 Serial Interfaces (COM)

Four serial RS232 interfaces (COM1 to COM4) are available. The printer (default COM3) and the Batching Master or Pipeline Master (default COM1) are connected here. The printer and Batching Master (Pipeline Master) can also be connected to USB or LAN. The dongle is plugged into the COM2 port.



2.14 ON/OFF-Tact-Switch



With this switch the PCC 400 is switched on or off. Switch on the PCC 400 only if all connectors are plugged in and tightened. You can shut down the PCC 400 by a short pressing the power switch.



Attention!

Do not switch off the PCC 400 by switching off the power supply. Turn off by briefly pressing the power button or via the software.

Wait until the HDD- and Power-LED no longer lights. Only then it is allowed to disconnect the PCC 400 from the power supply.

Don't press the button for more than 1 second, because then the PCC 400 shuts off without previously shutting down the operating system. This means that important data and programs could be destroyed on the hard disk.

2.15 Power indicator

In the PWR LED indicates a running system. The HDD-LED signalled that the HDD or SSD is accessed. If WDT flashes, the watchdog timer (not available in all software) is started.

2.16 Printer port

The printer is connected to a serial port (default COM3), a USB interface or via LAN (TCP/IP). The maximum length for the USB cable or RS232 cable is 5m. If your printer has a TTY or RS-422 interface, the cable length must not exceed 1000m. A converter from RS-232 (or USB) to TTY or RS-422 will be required.

A 5m RS-232 printer cable is included.

The printer connected to the COM3 requires the following settings:

Serial Data:	8 bit
Protocol:	Ready/Busy
Parity check:	YES
Parity selection:	EVEN
DSR Signal:	VALID
DTR Signal:	Ready On Power Up
Baud rate:	9600 BPS (default)

2.17 Connection to Batching Master / Pipeline Master

The Batching Master / Pipeline Master are connected to COM1 (optional COM3, COM4 or to a USB port). A connection cable for the required interface converter from RS-232 (or USB) or to RS-485 is included.

If the intrinsically safe Batching Master / Pipeline Master 110i or 210i are used, additionally interface modules of the type IPC 3x0i are needed. This and the interface converter are not included with the PCC 400.

2.18 Connection of a supervisory system

A supervisory system can be connected directly to the second interface of the Batching Master / Pipeline Master. For some applications (e. g. data-base connection), the LAN interface of the PCC 400 may be used.

The supervisory system can also be connected to a free serial port (default COM4). Then the data are forwarded from the PCC 400 to the Batching Master by the Modbus-Slave-Funktion.

Connection a supervisory system is an option and must be coordinated with the sales representative.

3 Certificate of Compliance

International Standards Laboratory <http://www.isl.com.tw>

Certificate

Issue Date: April 2, 2014
Ref. Report No. ISL-14HE084CE

Product Name : POC-200 Series
Models : POC-200; POC-210; POC-212; POC-222
Brand : Neosys
Responsible Party : Neosys Technology Inc.
Address : 15F., No.868-3, Zhongzheng Rd., Zhonghe Dist., New Taipei City 23586, Taiwan(R.O.C.)

We, **International Standards Laboratory**, hereby certify that:

The device bearing the trade name and model specified above has been shown to comply with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in European Council Directive- EMC Directive 2004/108/EC. The device was passed the test performed according to :

CE

Standards:
EN 55022: 2010 and CISPR 22: 2008 (modified)
EN 61000-3-2: 2006+A1:2009 +A2:2009 and IEC 61000-3-2: 2005+A1:2008 +A2:2009
EN 61000-3-3: 2008 and IEC 61000-3-3: 2008
EN 55024: 2010 and CISPR 24: 2010
EN 61000-4-2: 2009 and IEC 61000-4-2: 2008
EN 61000-4-3: 2006+A1: 2008 +A2: 2010 and IEC 61000-4-3:2006+A1: 2007+A2: 2010
EN 61000-4-4: 2004 +A1:2010 and IEC 61000-4-4: 2004 +A1:2010
EN 61000-4-5: 2006 and IEC 61000-4-5: 2005
EN 61000-4-6: 2009 and IEC 61000-4-6: 2008
EN 61000-4-8: 2010 and IEC 61000-4-8: 2009
EN 61000-4-11: 2004 and IEC 61000-4-11: 2004

I attest to the accuracy of data and all measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

International Standards Laboratory


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