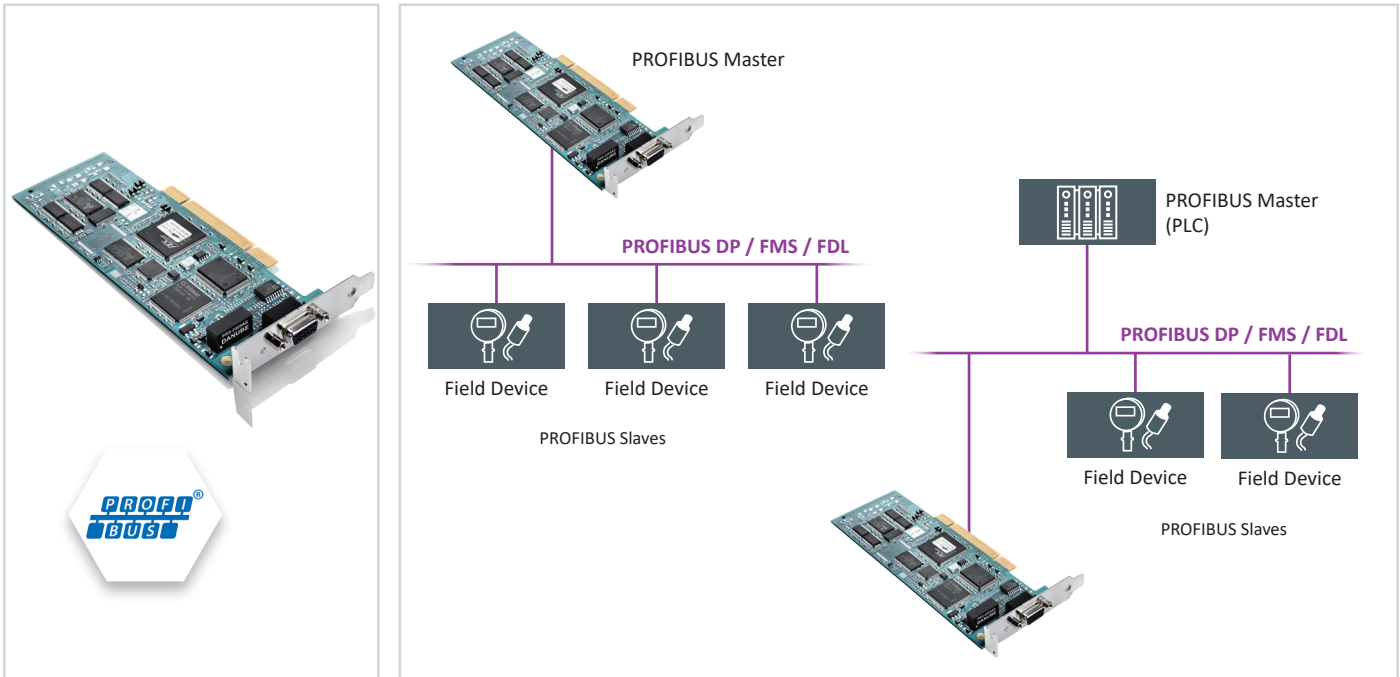


# PBpro PCI

## Universal PCI Boards for Use as Master or Slave

- Single and dual channel interface boards in universal PCI format for integrating PCs into PROFIBUS architectures as machine controllers, supervisory control applications, field devices or operator panels.



### Always the Fitting PROFIBUS Protocol

- PROFIBUS Master and Slave functionality
- Support of PROFIBUS DP, PROFIBUS FMS and PROFIBUS FDL protocols
- Universal interface solution for integration in industrial and embedded PCs

### Rapid Integration

- Direct access to all protocols via PROFIBUS API
- Sample programs including comments
- Integration in various plant asset management tools

### Large Choice of Drivers

- Use in Windows and Linux operating systems
- PROFIBUS CommDTM for FDT applications included in scope of delivery

# PBpro PCI

## Technical Data

	Master/Slave, Single Channel <sup>1</sup>	Slave, Single Channel <sup>1</sup>	Master/Slave, Dual Channel
<b>PROFIBUS Protocol</b>			
DP-V0 Master	•		•
DP-V1 Master: Acyclic C2 Services	•		•
DP-V2 Master <sup>2</sup>	•		•
FMS	•		•
FDL	•		•
DP-V0 Slave	•	•	•

Fieldbus Connection 9-Pin D-Sub female, EIA-485, galvanically isolated

Transfer Rates 9.6; 19.2; 45.45; 93.75; 187.5; 500; 1,500; 3,000; 6,000; 12,000 Kbit/s

PC Interface PCI V2.2, 128 KB Shared RAM Per Channel

Operating Temperature 0 °C ... +70 °C

Storage Temperature -20 °C ... +70 °C

Relative Humidity < 90 %, non-condensing

Dimensions 168 mm x 64 mm 168 mm x 64 mm 168 mm x 107 mm

### Power Supply

Supply Voltage 5 VDC / 3.3 VDC (±5 %)

Current Consumption Typically 500 mA / 200 mA Typically 500 mA / 200 mA Typically 700 mA / 300 mA

Drivers Available for Windows XP, Windows 7, Windows 8, Windows 10, Linux

Conformity



<sup>1</sup> Also Available with Low Profile Slot Bracket

<sup>2</sup> DP-V2 available for custom integration.

Please contact Softing to discuss your specific requirements.

## Scope of Delivery

Hardware	PC interface board
Software	Drivers, sample programs on CD-ROM
Documentation	On CD-ROM

## Order Numbers

PB-PRO1-PCI	Master/Slave, Single Channel
PB-PRO1-PCI/LP	Master/Slave, Single Channel, Low Profile
PB-PRO1S-PCI	Slave, Single Channel
PB-PRO1S-PCI/LP	Slave, Single Channel, Low Profile
PB-PRO2-PCI	Master/Slave, Dual Channel

Your local Softing contact:

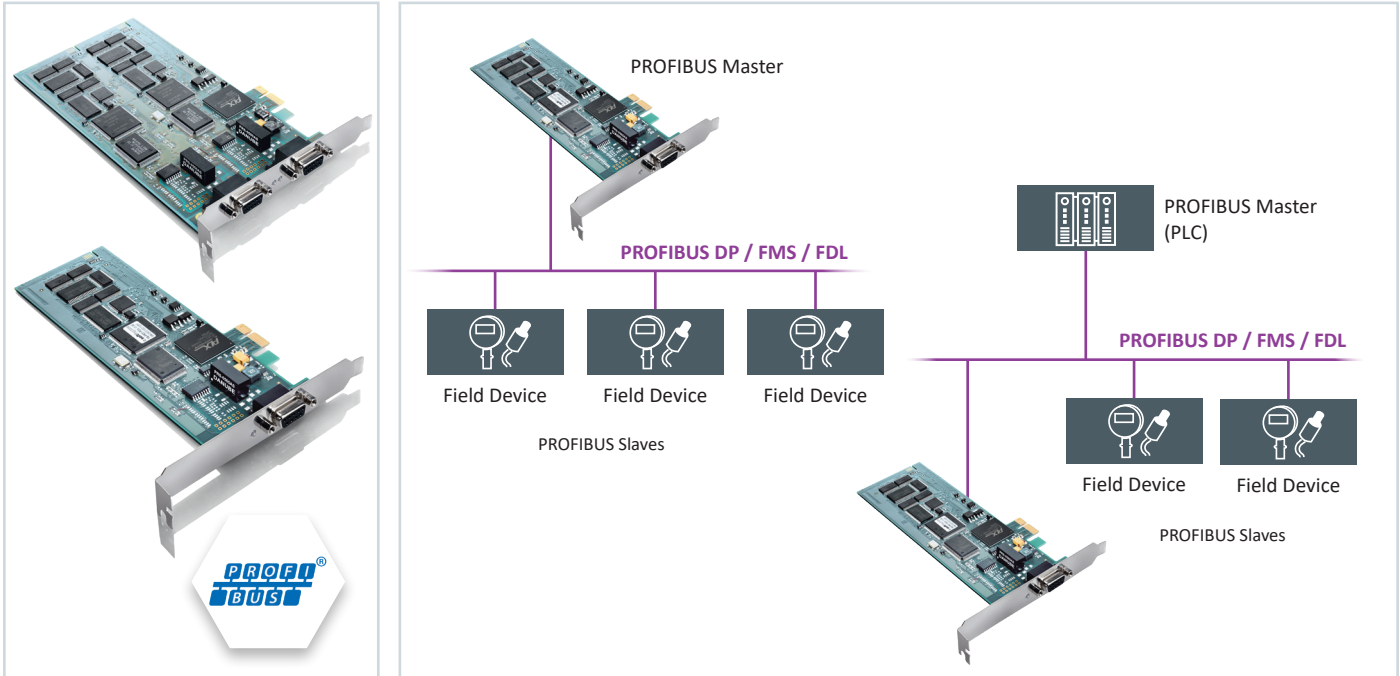
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# PBpro PCI Express

Universal PCI Express Boards for Use as Master or Slave

- Single and dual channel interface boards in PCI Express format
- Integrating PCs into PROFIBUS architectures as machine controllers, supervisory control applications, field devices or operator panels.



## Always the Fitting PROFIBUS Protocol

- PROFIBUS Master and Slave functionality
- Support of PROFIBUS DP, PROFIBUS FMS and PROFIBUS FDL protocols
- Universal interface solution for integration in industrial and embedded PCs

## Rapid Integration




- Direct access to all protocols via PROFIBUS API
- Sample programs including comments
- Integration in various plant asset management tools

## Large Choice of Drivers

- Use in Windows operating systems
- Linux driver in preparation
- PROFIBUS CommDTM for FDT applications included in scope of delivery

# PBpro PCI Express

## Technical Data

	Master/Slave, Single Channel <sup>1</sup>	Slave, Single Channel <sup>1</sup>	Master/Slave, Dual Channel
<b>PROFIBUS Protocol</b>			
DP-V0 Master	•		•
DP-V1 Master: Acyclic C2 Services	•		•
FMS	•		•
FDL	•		•
DP-V0 Slave	•	•	•
Fieldbus Connection	9-Pin D-Sub female, EIA-485, galvanically isolated		
Transfer Rates	9.6; 19.2; 45.45; 93.75; 187.5; 500; 1,500; 3,000; 6,000; 12,000 Kbit/s		
PC Interface	PCI Express x1 according to PCIe r1.0a and CEM 1.1, 512 KB Shared RAM per channel		
Operating Temperature	0 °C ... +70 °C		
Storage Temperature	-20 °C ... +70 °C		
Relative Humidity	< 90 %, non-condensing		
Dimensions	168 mm x 69 mm	168 mm x 69 mm	168 mm x 103 mm
<b>Power Supply</b>			
Supply Voltage	3,3 VDC / 12 VDC (±5 %)		
Current Consumption	Typically 500 mA / 90 mA	Typically 500 mA / 90 mA	Typically 640 mA / 170 mA
Drivers Available for	Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10		
Conformity	  		

<sup>1</sup> Also Available with Low Profile Slot Bracket

## Scope of Delivery

Hardware	PC interface board
Software	Drivers, sample programs on CD-ROM
Documentation	On CD-ROM

## Order Numbers

PB-PRO1-PCIE	Master/Slave, Single Channel
PB-PRO1-PCIE/LP	Master/Slave, Single Channel, Low Profile
PB-PRO1S-PCIE	Slave, Single Channel
PB-PRO1S-PCIE/LP	Slave, Single Channel, Low Profile
PB-PRO2-PCIE	Master/Slave, Dual Channel

Your local Softing contact:

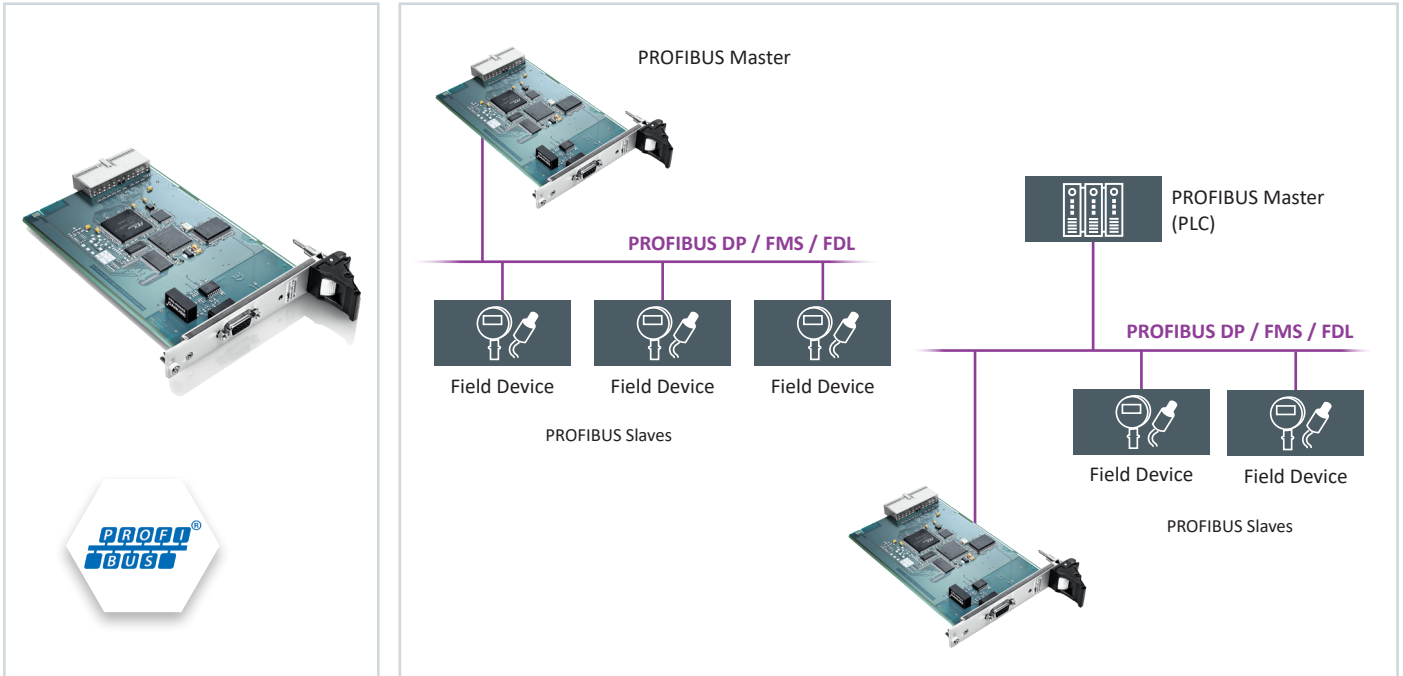
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# PBpro CompactPCI

CompactPCI Interface Card for Use as Master or Slave

- Single Channel Interface Card in CompactPCI Format for Integrating 19" PCs into PROFIBUS Architectures as Machine Controllers, Supervisory Control Applications, Visualization Systems or Field Devices.



## Always the Fitting PROFIBUS Protocol

- PROFIBUS Master and Slave functionality
- Support of PROFIBUS DP, PROFIBUS FMS and PROFIBUS FDL protocols
- Universal interface solution for integration in industrial and embedded PCs

## Rapid Integration

- Direct access to all protocols via PROFIBUS API
- Sample programs including comments
- Integration in various plant asset management tools

## Large Choice of Drivers

- Use in Windows and Linux operating systems
- PROFIBUS CommDTM for FDT applications included in scope of delivery

## Ideal for Harsh Environments

- Resistant to vibrations thanks to robust 19" technology
- Card secured against accidental disconnection by screws on front plate

# PBpro CompactPCI

## Technical Data

PROFIBUS Protocols	DP-V0 Master
	DP-V1 Master: acyclic C2 services
	DP-V2 Master <sup>1</sup>
	FMS
	FDL
	DP-V0 Slave
Fieldbus Connection	9-Pin D-Sub female on ribbon cable, EIA-485, galvanically isolated
Transfer Rates	9,6; 19,2; 45,45; 93,75; 187,5; 500; 1.500; 3.000; 6.000; 12.000 Kbit/s
PC Interface	CompactPCI, 128 KB Shared RAM
Operating Temperature	0 °C ... +70 °C
Storage Temperature	-20 °C ... +70 °C
Relative Humidity	< 90 %, non-condensing
Dimensions	160 mm x 100 mm

## Power Supply

Supply Voltage 5 VDC / 3,3 VDC (±5 %)

Current Consumption Typically 500 mA / 200 mA

Drivers Available for Windows XP, Windows 7, Windows 8, Windows 10, Linux

Conformity



<sup>1</sup> DP-V2 available for custom integration.  
Please contact Softing to discuss your specific requirements.

## Scope of Delivery

Hardware	PC interface board
Software	Drivers, sample programs on CD-ROM
Documentation	Manual on CD-ROM

## Order Numbers

PB-PRO1-CPCI	PBpro PROFIBUS CompactPCI Interface Card
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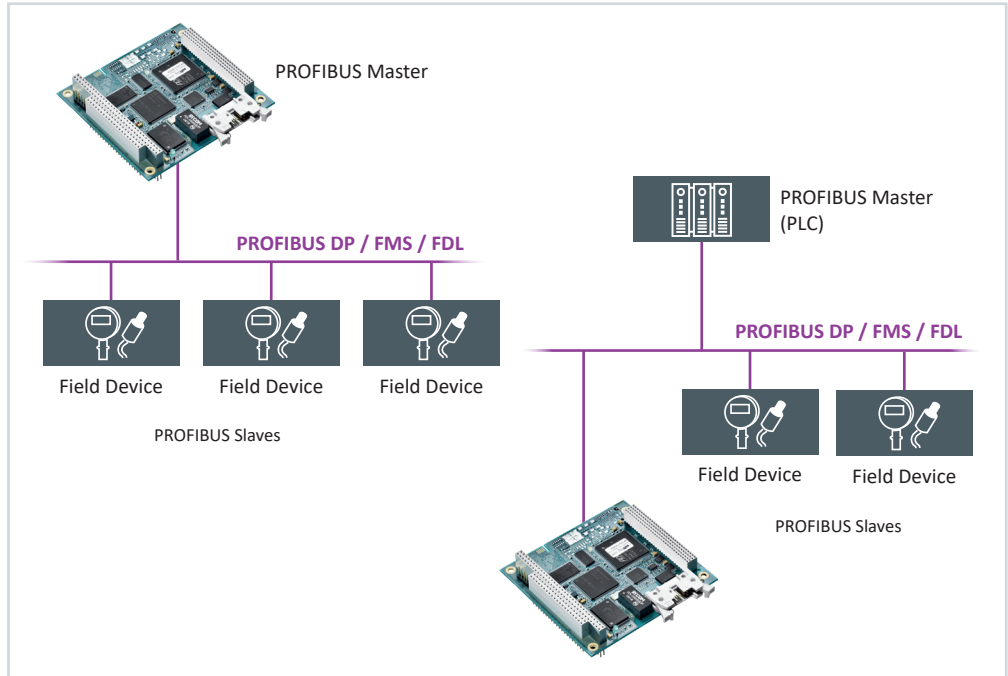
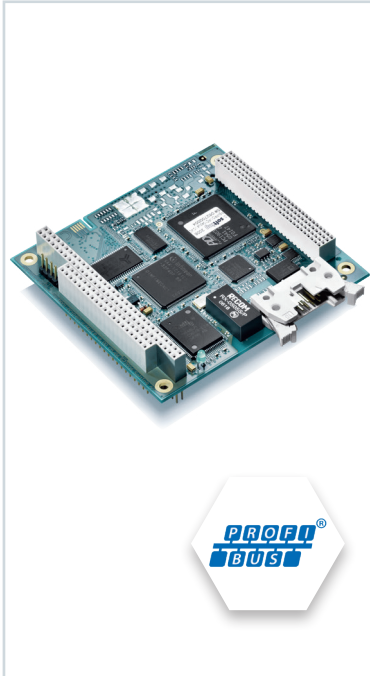
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# PBpro PC/104plus

PC/104plus Board for Use as Master or Slave

- Single channel interface board in PC/104plus format for integrating PCs into PROFIBUS architectures as machine controllers, supervisory control applications, visualization systems or field devices.



## Always the Fitting PROFIBUS Protocol

- PROFIBUS Master and Slave functionality
- Support of PROFIBUS DP, PROFIBUS FMS and PROFIBUS FDL protocols
- Universal interface solution for integration in industrial and embedded PCs

## Rapid Integration

- Direct access to all protocols via PROFIBUS API
- Sample programs including comments
- Integration in various plant asset management tools

## Large Choice of Drivers

- Use in Windows and Linux operating systems
- PROFIBUS CommDTM for FDT applications included in scope of delivery

## Wide Temperature Range

- Extended temperature version supporting operating temperature range between -40 °C and +85 °C
- Interface adjustable according to customer specifications, including hardware adaptations

# PBpro PC/104plus

## Technical Data

PROFIBUS Protocol	DP-V0 Master
	DP-V1 Master: Acyclic C2 Services
	DP-V2 Master <sup>1</sup>
	FMS
	FDL
	DP-V0 Slave
Fieldbus Connection	9-Pin D-Sub female on ribbon cable, EIA-485, galvanically isolated
Transfer Rates	9.6; 19.2; 45.45; 93.75; 187.5; 500; 1,500; 3,000; 6,000; 12,000 Kbit/s
PC Interface	PC/104plus V2.0, 128 KB Shared RAM
Operating Temperature	Standard Version: 0 °C ... +70 °C, XT Version: -40 °C ... +85 °C
Storage Temperature	Standard Version: -20 °C ... +70 °C, XT Version: -40 °C ... +85 °C
Relative Humidity	< 90 %, non-condensing
Dimensions	90.2 mm x 96 mm

## Power Supply

Supply Voltage 5 VDC / 3.3 VDC (±5 %)

Current Consumption Typically 500 mA / 200 mA

Drivers Available for Windows XP, Windows 7, Windows 8, Windows 10, Linux

Conformity



<sup>1</sup> DP-V2 available for custom integration.

Please contact Softing to discuss your specific requirements.

## Scope of Delivery

Hardware	PC interface board
Software	Drivers, sample programs on CD-ROM
Documentation	On CD-ROM

## Order Numbers

PB-PRO1-PC104+	PBpro PC/104plus interface board
PB-PRO1-PC104+XT	PBpro PC/104plus interface board, extended temperature range
PB-PRO1-PCI104	PBpro PCI/104 interface board (without ISA bus connector)
PB-PRO1-PCI104-XT	PBpro PCI/104 interface board (without ISA bus connector), extended temperature range

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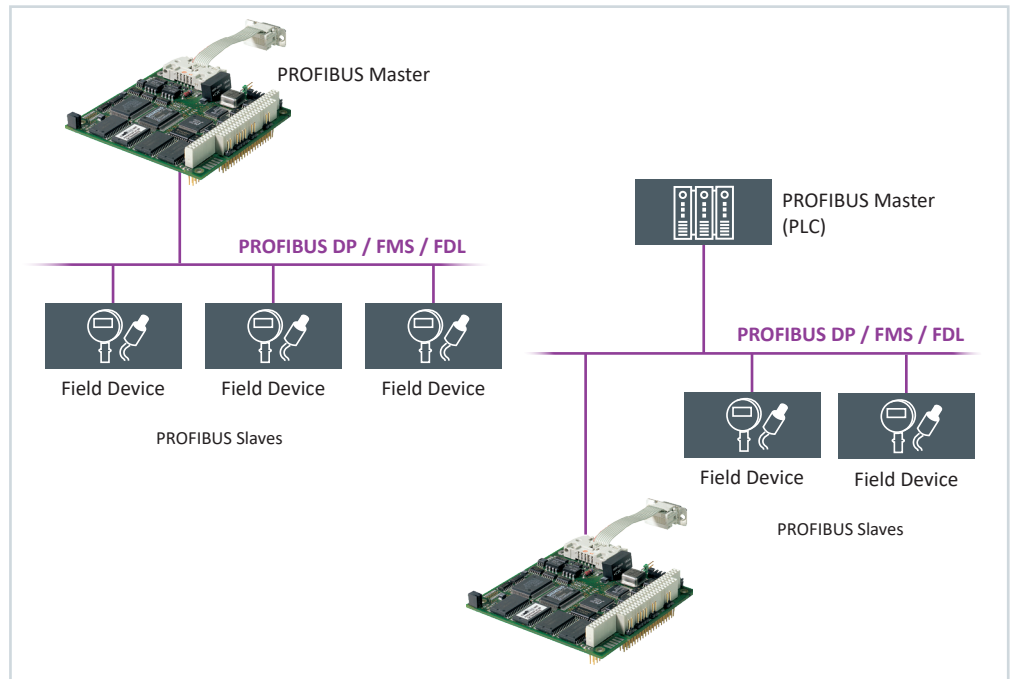
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# PROFI104

## PC/104 Board for Use as Master or Slave

- Single channel interface board in PC/104 format for integrating PCs into PROFIBUS architectures as machine controllers, supervisory control applications, visualization systems or field devices.



### Always the Fitting PROFIBUS Protocol

- PROFIBUS Master and Slave functionality
- Support of PROFIBUS DP, PROFIBUS FMS and PROFIBUS FDL protocols
- Universal interface solution for integration in industrial and embedded PCs

### Rapid Integration




- Direct access to all protocols via PROFIBUS API
- Sample programs including comments
- Integration in various plant asset management tools

### Wide Temperature Range

- Extended temperature version supporting operating temperature range between -40 °C and +85 °C
- Interface adjustable according to customer specifications, including hardware adaptations

# PROFI104

## Technical Data

	Master/Slave	Master/Slave, extended temperature range
PROFIBUS Protocol		
DP-V0 Master	•	•
DP-V1 Master: Acyclic C2 Services	•	•
FMS	•	•
FDL	•	•
DP-V0 Slave	•	•
Fieldbus Connection	9-Pin D-Sub female on ribbon cable, EIA-485, galvanically isolated	
Transfer Rates	9.6; 19.2; 45.45; 93.75; 187.5; 500; 1,500; 3,000; 6,000; 12,000 Kbit/s	
PC Interface	PC/104, 16 Bit, 16 KB Dual Ported RAM	
Interrupts	5, 10, 11, 12, 15	
Operating Temperature	0 °C ... +70 °C	-40 °C ... +85 °C
Storage Temperature	-20 °C ... +70 °C	-40 °C ... +85 °C
Relative Humidity	< 90 %, non-condensing	
Dimensions	90.2 mm x 96 mm	
Power Supply		
Supply Voltage	5 VDC (±5 %)	
Current Consumption	Typically 700 mA	
Drivers Available for	Windows XP, Linux	
Konformität	<div><div></div><div></div><div></div></div>	

## Scope of Delivery

Hardware	PC interface board, ribbon cable with D-Sub connector
Software	Drivers, sample programs on CD-ROM
Documentation	On CD-ROM

## Order Numbers

	Master/Slave	Master/Slave, extended temperature range
	PB-PC104-MS	PB-PC104-MS-XT

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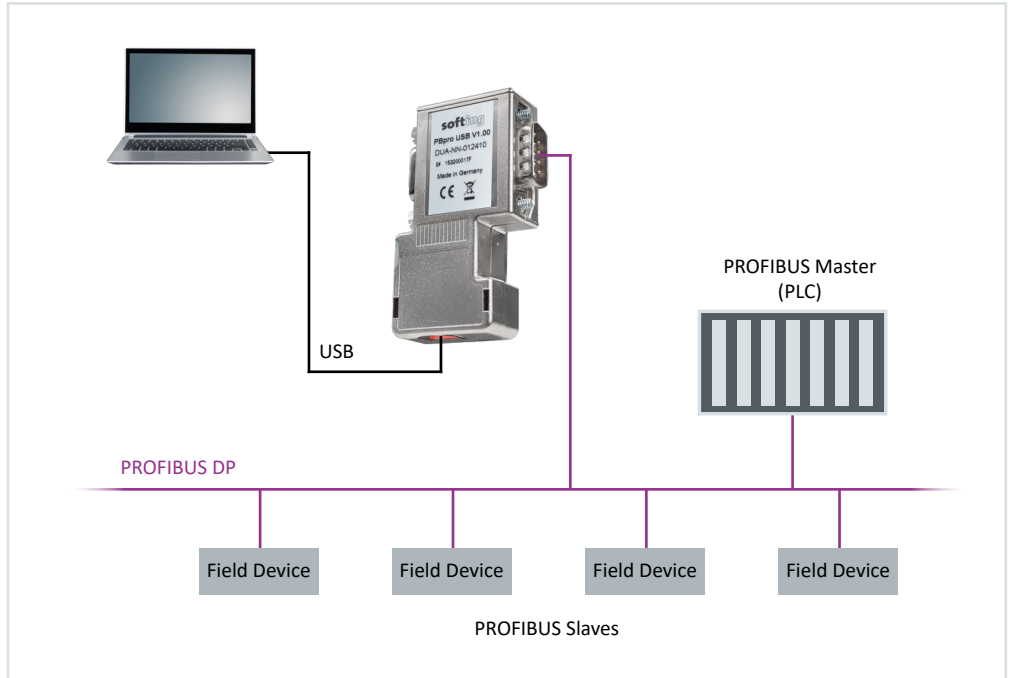
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# PBpro USB

## Universal PROFIBUS Interface with USB High Speed Port

- **Mobile PROFIBUS interface for operation as a PROFIBUS Master**
- **Wide variety of tasks from network configuration and device parameterization to plant maintenance and production data acquisition**
- **Quick and easy installation**



### Handy companion for efficient integration

- Compact device in the PROFIBUS connector housing
- DP Master Class 1, DP Master Class 2, PROFIBUS FDL
- Free PROFIdtm PROFIBUS Communication DTM supporting parameterization of PROFIBUS devices by FDT tools
- Programming examples for the Windows API for easy use in customer applications
- Connectivity with Emerson's AMS for access to HART devices via a PROFIBUS network using Softing's free TACC software

### Variety of applications



- Device parameterization via FDT/DTM
- Integrated with numerous parameterization and asset management systems
- PROFIBUS connection for PC-based measurement and monitoring systems
- Quick and easy PROFIBUS connection for applications such as SCADA or MES

### Simple connection and configuration

- Fast PC connection via reliable USB cable
- Powered by USB, no external power supply required
- Direct connection to the PROFIBUS, thus no reflection-related interference
- Same driver setup and API as for all other Softing PROFIBUS interfaces
- Drivers for Windows XP to Windows 10

# PBpro USB

## Technical Data

PROFIBUS Protocol	<ul style="list-style-type: none"><li>• PROFIBUS DP-V0 Master</li><li>• PROFIBUS DP-V1 Master: acyclic C2 Services</li><li>• FDL</li></ul>
Fieldbus Connection	9-pin D-Sub connector
Transfer Rates	9,6; 19,2; 45,45; 93,75; 187,5; 500; 1500; 3000; 6000; 12000 Kbit/s
PC Interface	USB 2.0, High Speed (480 Mbps)
Status LEDs	Multicolored LED indicators for PROFIBUS and USB
Operating Temperature	0 °C ... +60 °C
Storage Temperature	-20 °C ... +70 °C
Relative Humidity	< 90%, non-condensing
Housing	Metalized plastic
Dimensions	64 mm x 40 mm x 17 mm
Power Supply	<ul style="list-style-type: none"><li>• Supply voltage: 5 V via USB</li><li>• Current consumption: typically 350 mA (USB)</li></ul>
Drivers available for	Windows XP, Windows 7, Windows 8, Windows 10
Conformity	 FCC VCCI 

## Scope of Delivery

Hardware	PBpro USB hardware, USB cable
Software	Drivers, sample programs on CD-ROM
Documentation	On CD-ROM

## Order Numbers

DUL-NN-012410	PBpro USB
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Your local Softing contact:

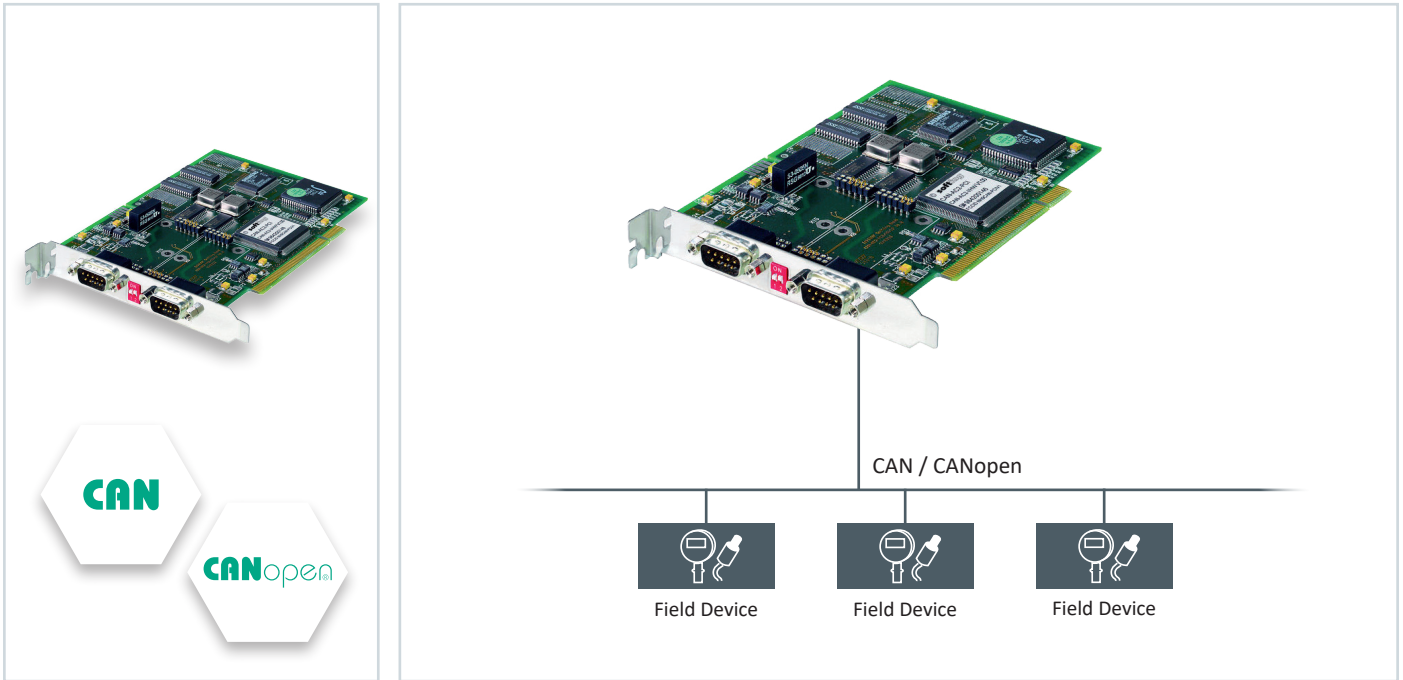
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# CAN-AC PCI

Universal PCI Express Boards with On-Board Microcontroller

- Single and dual channel interface boards in PCI format for use in CAN and CANopen networks.



## Flexible Interface for Industrial and Embedded PCs

- Data exchange between PC applications and connected CAN bus
- Available in single and dual channel versions
- Universal solution matching almost any CAN application
- Use, for instance, in machine controllers, PC-based applications, test rigs or real-time simulations
- Integration in Mathworks xPC Target

## Application in a Wide Variety of Target Systems




- Use in Windows operating systems
- Linux driver
- Sample projects for C, C# or VB.NET with commented source code

## Rapid Integration with right Software Interface

- Flexible API including FIFO storage buffering all sent and received messages, separately for each channel
- No data loss when computer working on other tasks
- Filtering and buffering of messages of interest
- Automatic transmission of data to bus in exact, individually configurable cycles
- Free CANopen Client API available for use in CANopen networks

# CAN-AC PCI

## Technical Data

	Single Channel	Dual Channel
CAN Protocol and Available APIs		
CAN V2.0 (11/29 Bit IDs)	•	•
CAN API	•	•
CANopen Client API	•	•
CAN Bus Connection		
Connector	9-pin D-sub male	
No. of Channels	1	2
Galvanically Isolated	•	•
Physical Layer	ISO 11898-2 (CAN High Speed)	
PC Interface	PCI Rev. 2.1, 4 KB DPRAM	
Interrupts	Plug-and-play	
Operating Temperature	0 °C ... +70 °C	
Storage Temperature	-20 °C ... +70 °C	
Relative Humidity	< 90 %, non-condensing	
Dimensions	160 mm x 100 mm	
Power supply		
Supply voltage	5 VDC (±5 %)	
Current consumption	Typically 380 mA	Typically 410 mA
Drivers available for	Windows XP, Windows 7, Windows 8, Windows 10, Linux	
Conformity	<div><div></div><div></div><div></div></div>	

## Scope of Delivery

Hardware	PC interface board
Software	Drivers, APIs, sample programs on CD-ROM
Documentation	On CD-ROM

## Order Numbers

	Single Channel	Dual Channel
	CAN-AC1-PCI	CAN-AC2-PCI

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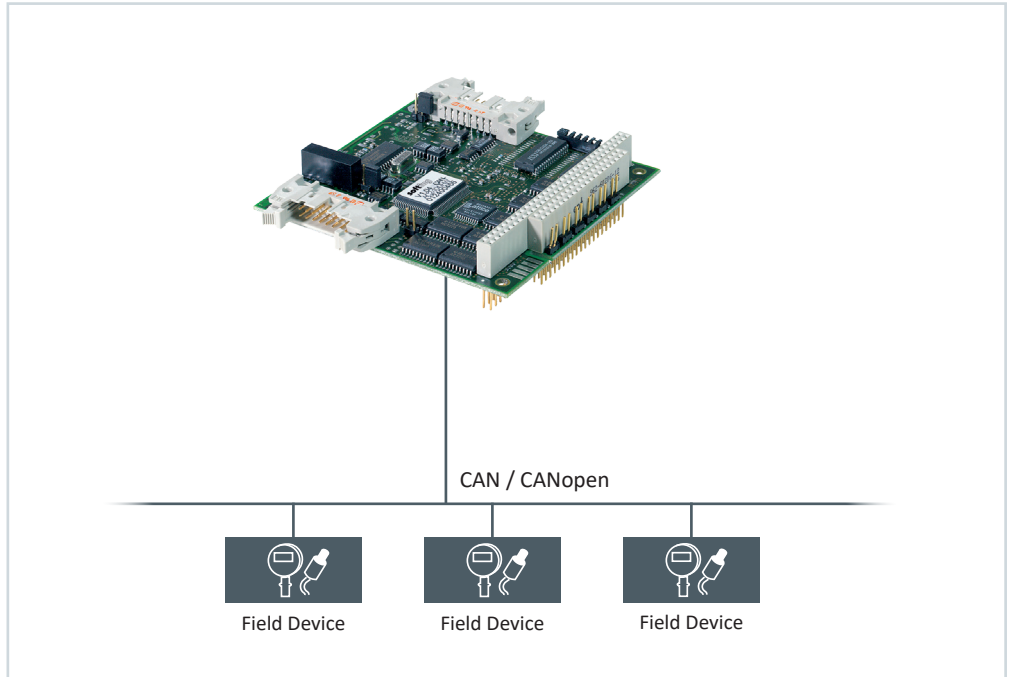
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# CAN-AC PC/104

Universal PC/104 Boards with On-Board Microcontroller

- Single and dual channel interface boards in PC/104 format for use in CAN and CANopen networks.



## Flexible Interface for Industrial and Embedded PCs

- Data exchange between PC applications and connected CAN bus
- Available in single and dual channel versions
- Universal solution matching almost any CAN application
- Use, for instance, in machine controllers, PC-based applications, test rigs or real-time simulations
- Integration in Mathworks xPC Target

## Rapid Integration with Right Software Interface




- Flexible API including FIFO storage buffering all sent and received messages, separately for each channel
- No data loss when computer working on other tasks
- Filtering and buffering of messages of interest
- Automatic transmission of data to bus in exact, individually configurable cycles
- Free CANopen Client API available for use in CANopen networks

## Suitable for Many Target Systems and Harsh Environments

- Support of Windows and many other operating systems and real-time environments
- Extended temperature version available supporting operating temperature range between -40 °C and +85 °C
- Interface adjustable according to special requirements for series use, including hardware adaptations

# CAN-AC PC/104

## Technical Data

	Single Channel	Dual Channel	Dual Channel, Extended Temperature Range
CAN Protocol and Available APIs			
CAN V2.0 (11/29 Bit IDs)	•	•	•
CAN API	•	•	•
CANopen Client API	•	•	•
CAN Bus Connection			
Connector	9-pin D-sub male on ribbon cable		
No. of Channels	1	2	2
Galvanically Isolated	•	•	•
Physical Layer	ISO 11898-2 (CAN High Speed)		
PC Interface	PC/104, 8 Bit, 4 KB address space in the range of C0000xH ... FFC00xH		
Interrupts	5, 9, 10, 11, 12, 15		
Operating Temperature	0 °C ... +70 °C		-40 °C ... +85 °C
Storage Temperature	-20 °C ... +70 °C		-40 °C ... +85 °C
Relative Humidity	< 90 %, non-condensing		
Dimensions	90,2 mm x 96 mm		
Power supply			
Supply voltage	5 VDC (±5 %)		
Current consumption	Typically 90 mA	Typically 130 mA	Typically 130 mA
Drivers available for	Windows XP, Windows 7, Windows 8, Windows 10, DOS, Linux		
Conformity	<div><div></div><div></div><div></div></div>		

## Scope of Delivery

Hardware	PC interface board
Software	Drivers, APIs, sample programs on CD-ROM
Documentation	On CD-ROM

## Order Numbers

	Single Channel	Dual Channel	Dual Channel, Extended Temperature Range
	CAN-AC1-104	CAN-AC2-104	CAN-AC2-104I

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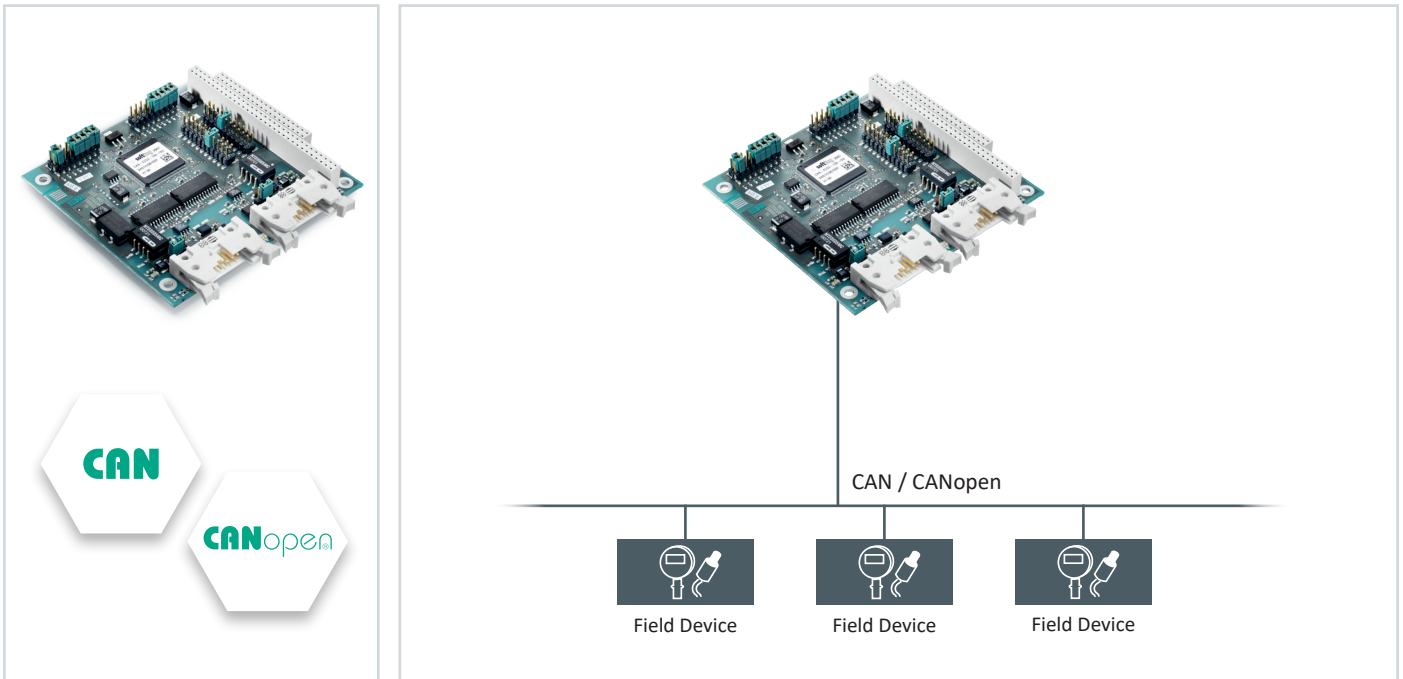
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# CAN-OEM-104

## Low-Cost Passive PC/104 Boards Without Microcontroller

- Single and dual channel interface boards in PC/104 format for series use in CAN and CANopen networks.



### Low Cost Interface for Industrial and Embedded PCs

- Data exchange between PC applications and connected CAN bus
- Available in single and dual channel versions
- Optional galvanic isolation
- Efficient solution meeting specific technical and cost requirements of almost any CAN application
- Use, for instance, in machine controllers, medical applications or energy technology
- Cost optimization through standard off-the-shelf versions

### Rapid Integration with Right Software Interface

- API including FIFO storage buffering all sent and received messages, separately for each channel
- No data loss when computer working on other tasks
- Free CANopen Client API available for use in CANopen networks

### Suitable for Many Target Systems and Harsh Environments

- Use in Windows operating systems
- Linux driver
- Standard version supporting operating temperature range between -20 °C and +75 °C
- Interface adjustable according to special requirements for series use, such as protective coating or different cable lengths

# CAN-OEM-104

## Technical Data

	Single Channel	Single Channel, isolated	Dual Channel	Dual Channel, isolated
CAN Protocol and Available APIs				
CAN V2.0 (11/29 Bit IDs)	•	•	•	•
CAN API	•	•	•	•
CANopen Client API	•	•	•	•
CAN Bus Connection				
Connector		9-pin D-sub male on ribbon cable		
No. of Channels	1	1	2	2
Galvanically Isolated		•		•
Controller		SJA1000		
Physical Layer		ISO 11898-2 (CAN High Speed)		
PC Interface	PC/104, 8 Bit, 1 KB address space in the range of C0000xH ... FFC00xH			
Interrupts	3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 15			
Operating Temperature	-20 °C ... +75 °C			
Storage Temperature	-40 °C ... +85 °C			
Relative Humidity	< 90 %, non-condensing			
Dimensions	90,2 mm x 96 mm			
Weight	Approximately 70 g	Approximately 70 g	Approximately 80 g	Approximately 80 g
Power Supply				
Supply Voltage	5 VDC (±5 %)			
Current Consumption	Typically 90mA	Typically 130 mA	Typically 130 mA	Typically 210 mA
Drivers Available for	Windows XP, Windows 7, DOS, Linux			
Conformity	<div><div><div></div><div>CE</div></div><div><div></div><div>RoHS COMPLIANT</div></div></div>			

## Scope of Delivery

Hardware	PC interface board
Software	Drivers, APIs, sample programs on CD-ROM
Documentation	On CD-ROM

## Order Numbers

	Single Channel	Single Channel, isolated	Dual Channel	Dual Channel, isolated
	CAN-OEM1-104	CAN-OEM1-104-ISO	CAN-OEM2-104	CAN-OEM2-104-ISO

## Additional Products and Services

CAN-104-CBL/STD	CAN connection cable for CAN-OEM-104 with 9-pin D-sub connector, length approximately 17 cm
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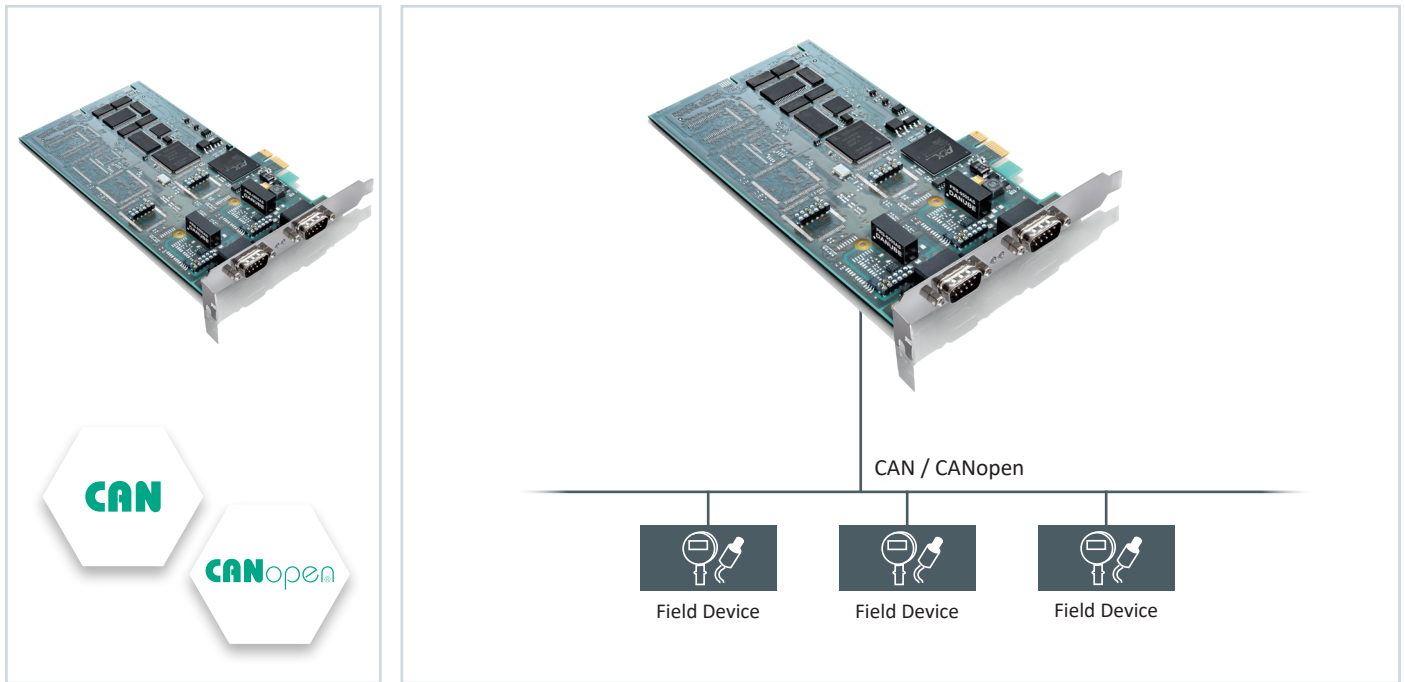
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# CANpro PCI Express

Universal PCI Express Boards with On-Board Microcontroller

- Single and dual channel interface boards in PCI Express format for use in CAN and CANopen networks.



## Flexible Interface for Industrial and Embedded PCs

- Data exchange between PC applications and connected CAN bus
- Available in single and dual channel versions
- Universal solution matching almost any CAN application
- Utilization e.g. in machine controllers, PC-based applications or test rigs

## Application in a Wide Variety of Target Systems




- Usage in Windows operating systems
- Linux driver
- Sample projects for C, C# or VB.NET with commented source code

## Rapid Integration With the Right Software Interface

- Flexible API including FIFO storage buffering all sent and received messages, separated for each channel
- No data loss when computer working on other tasks
- Filtering and buffering of messages of interest
- Automatic transmission of data to bus in exact, individually configurable cycles
- Free CANopen Client API available for use in CANopen networks

# CANpro PCI Express

## Technical Data

	Single Channel <sup>1</sup>	Dual Channel
<b>CAN Protocol and Available APIs</b>		
CAN V2.0 (11/29 Bit IDs)	•	•
CAN API	•	•
CANopen Client API	•	•
<b>CAN Bus Connection</b>		
Connector	9-pin D-sub male	
No. of Channels	1	2
Galvanically Isolated	•	•
Physical Layer	ISO 11898-2 (CAN High Speed)	
PC Interface	PCI Express x1 According to PCIe r1.0a and CEM 1.1, 512 KB Shared RAM per Channel	
Interrupts	Plug-and-Play	
Operating Temperature	0 °C ... +70 °C	
Storage Temperature	-20 °C ... +70 °C	
Relative Humidity	< 90 %, non-condensing	
Dimensions	168 mm x 69 mm	168 mm x 103 mm
<b>Power supply</b>		
Supply voltage	3.3VDC / 12VDC (± 5%)	
Current consumption	Typically 500 mA / 60 mA	Typically 500 mA / 90 mA
Drivers available for	Windows XP, Windows 7, Windows 8, Windows 10, Linux	
Conformity	  	

<sup>1</sup> Also available with low profile slot bracket

## Scope of Delivery

Hardware	PC interface board
Software	Drivers, APIs, sample programs on CD-ROM
Documentation	On CD-ROM

## Order Numbers

CAN-PRO1-PCIE	Single Channel
CAN-PRO1-PCIE/LP	Single Channel, Low Profile
CAN-PRO2-PCIE	Dual Channel

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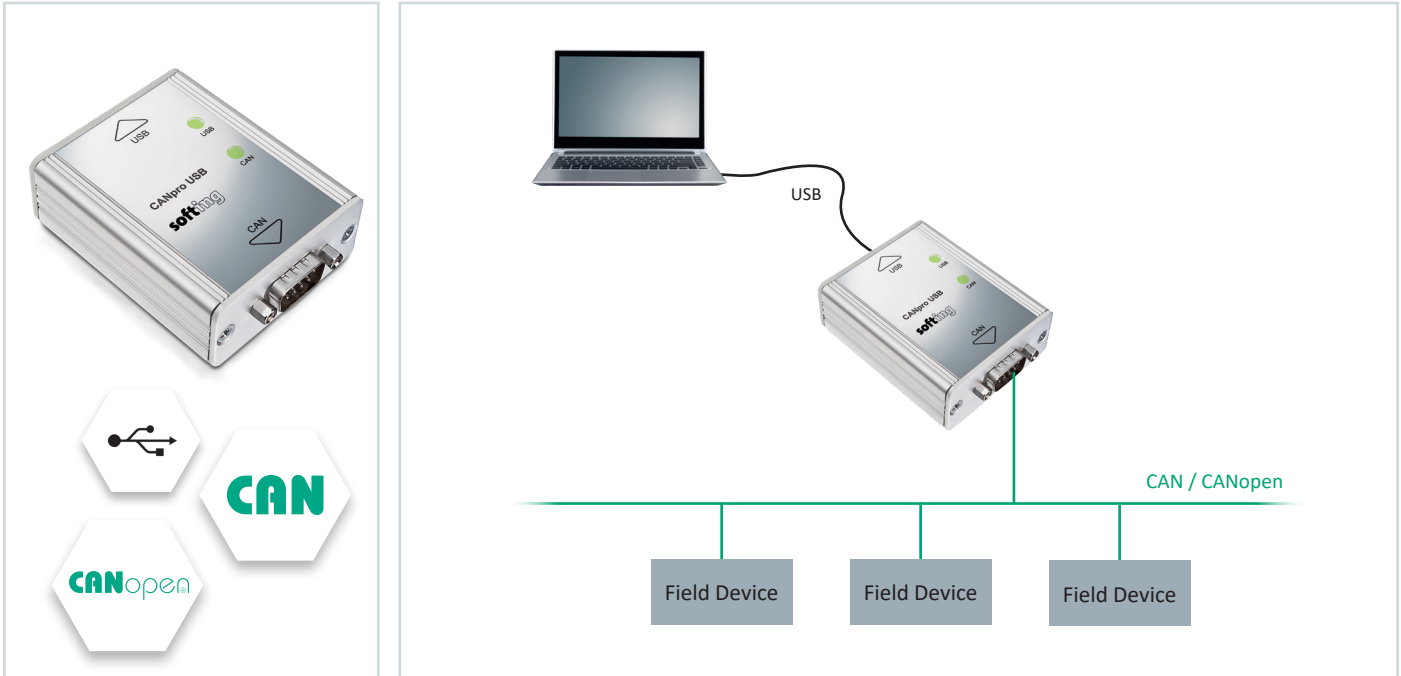
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# CANpro USB

## High Speed USB to CAN Interface Card for Mobile Use

- Top performing and fast access to CAN / CANopen networks
- Suitable for a wide variety of CAN and CANopen applications
- Integration of applications like control, measurement, configuration and analysis tasks



### High data throughput resulting in short response time

- Single channel CAN interface card with USB 2.0 high speed connector
- Processor and speed-optimized firmware designed for 100% bus load at 1 Mbit/s
- High data throughput and very short response times of 100  $\mu$ s to 500  $\mu$ s
- Suitable for running wide variety of applications, including time-critical ones
- Time stamp for CAN messages (1  $\mu$ s resolution,  $\pm 10 \mu$ s Jitter)
- Easy-to-use
- USB and CAN status shown by LEDs
- Easy installation by simply connecting USB cable to PC and D-Sub connector to CAN network
- No power supply required

### Suitable for in-house or mobile usage

- Small but robust metal housing suited for everyday use
- Heavy duty version offering extensive temperature range (-20°C ... 70°C) and lockable USB cable connector with special mounting kit for fixing to PC, ideal for mobile use in harsh industrial environments

### Comprehensive functionality supporting a wide variety of use cases

- Easy integration into CAN applications
- Numerous free-of-charge programming interfaces:
  - CAN C-API supporting various operating modes (FIFO and Object Buffer)
  - CAN.NET API
  - CANopen client API

# CANpro USB

## Technical Data

CAN protocol and available APIs	CAN V2.0 (11/29 Bit-IDs) CAN API CANopen Client API
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## Bus Connection

Connector	9-pin D-sub male
Galvanically isolated	Yes
Physical layer	ISO 11898-2 (CAN High Speed)

PC Interface	USB 2.0 High Speed, 480 Mbit/s
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## Indicators

USB LED	USB status
CAN LED	CAN status

Operation Temperature	0 °C ... +55 °C (standard version) / -20 °C ... +70 °C (heavy duty version)
Storage Temperature	-20 °C ... +70 °C (standard version) / -20 °C ... +70 °C (heavy duty version)
Relative Humidity	< 90 %, non-condensing
Dimensions	74 mm x 55 mm x 26 mm

## Power Supply

Supply Voltage	5 VDC (±5 %) via USB connector
Current Consumption	Typically 200 mA

Drivers Available for	Windows XP, Windows 7, Windows 8, Windows 10, Linux
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## Conformity



## Scope of Delivery

Hardware (Standard Version)	CANpro USB (standard version), USB cable
Hardware (Heavy Duty Version)	CANpro USB (heavy duty version), lockable USB cable with cable connector and mounting kit
Software	Drivers, APIs, sample programs on CD-ROM
Documentation	Manual on CD-ROM

## Order Numbers

DUL-OO-012410	CANpro USB (standard version)
DUL-OO-012411	CANpro USB (heavy duty version)

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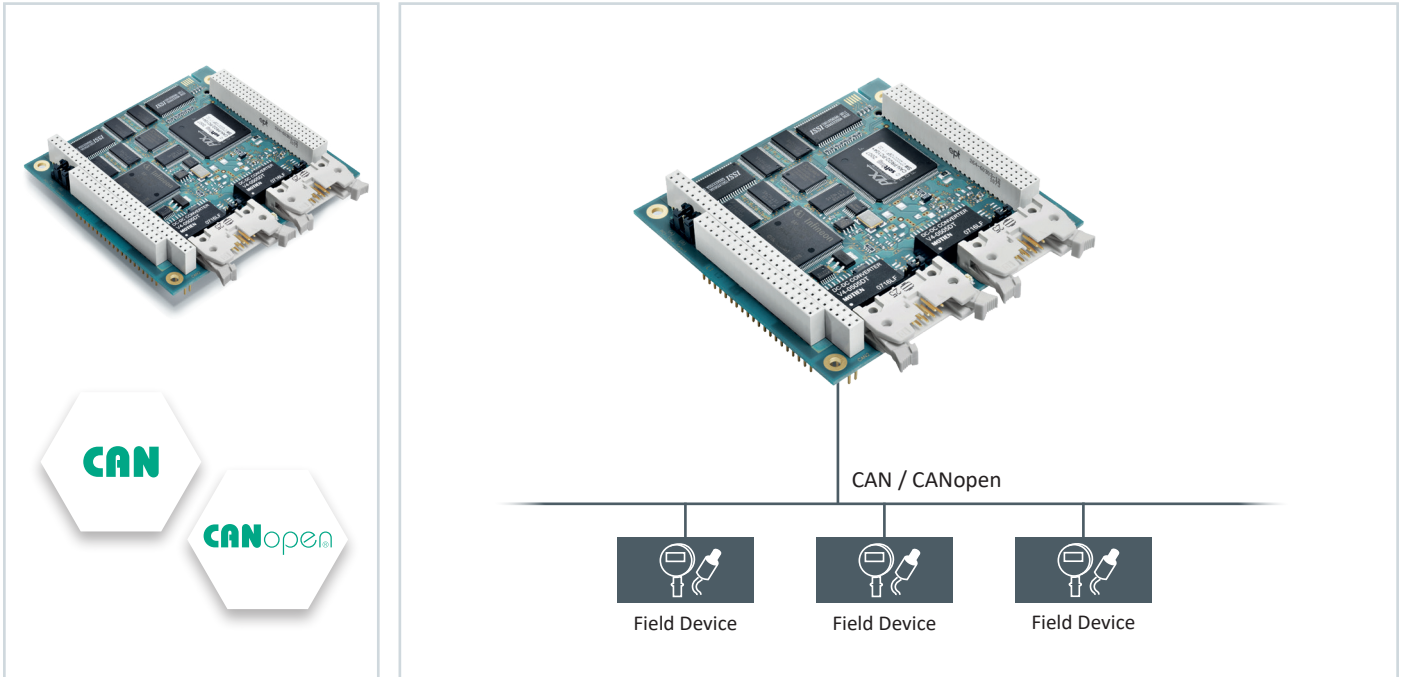
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# CANpro PC/104plus

Universal PC/104plus Boards with On-Board Microcontroller

- Single and dual channel interface boards in PC/104plus format for use in CAN and CANopen networks.



## Flexible Interface for Industrial and Embedded PCs

- Data exchange between PC applications and connected CAN bus
- Available in single and dual channel versions
- Universal solution matching almost any CAN application
- Use, for instance, in machine controllers, PC-based applications or test rigs

## Rapid Integration with Right Software Interface




- Flexible API including FIFO storage buffering all sent and received messages, separately for each channel
- No data loss when computer working on other tasks
- Filtering and buffering of messages of interest
- Automatic transmission of data to bus in exact, individually configurable cycles
- Free CANopen Client API available for use in CANopen networks

## Suitable for Many Target Systems and Harsh Environments

- Use in Windows operating systems
- Linux driver
- Extended temperature version available supporting operating temperature range between -40 °C and +85 °C
- Interface adjustable according to customer specifications, including hardware adaptations

# CANpro PC/104plus

## Technical Data

	Single Channel	Dual Channel	Dual Channel, Extended Temperature Range
CAN Protocol and Available APIs			
CAN V2.0 (11/29 Bit IDs)	•	•	•
CAN API	•	•	•
CANopen Client API	•	•	•
CAN Bus Connection			
Connector		9-pin D-sub male on ribbon cable	
No. of Channels	1	2	2
Galvanically Isolated	•	•	•
Physical Layer		ISO 11898-2 (CAN High Speed)	
PC Interface		PC/104plus V2.0, 512 KB Shared RAM	
Operating Temperature	0 °C ... +70 °C		-40 °C ... +85 °C
Storage Temperature	-20 °C ... +70 °C		-40 °C ... +85 °C
Relative Humidity	< 90 %, non-condensing		
Dimensions	90,2 mm x 96 mm		
Power supply			
Supply voltage		5 VDC / 3.3 VDC (±5 %)	
Current consumption	Typically 300 mA / 150 mA	Typically 350 mA / 150 mA	Typically 350 mA / 150 mA
Drivers available for	Windows XP, Windows 7, Windows 8, Windows 10, Linux		
Conformity	<div><div></div><div></div><div></div></div>		

## Scope of Delivery

Hardware	PC interface board, ribbon cable with D-sub connector
Software	Drivers, APIs, sample programs on CD-ROM
Documentation	On CD-ROM

## Order Numbers

	Single Channel	Dual Channel	Dual Channel, Extended Temperature Range
	CAN-PRO1-PC104+	CAN-PRO2-PC104+	CAN-PRO2-PC104+XT

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