

# You CAN get it...

Hardware, software and brainware for CAN bus applications



Distribución: ER-SOFT, S.A. Email: er@er-soft.com, Tel: +34 916 408 408

# You have a vision.

You are working on the future of your company and planning successful products for tomorrow's markets.

You want to translate your projects into reality, so you look for a responsive and reliable partner.

You set great store by the functionality of your development tools and the quality of the hardware you use.







## Engineering on your behalf – from the idea through to manufacture

We support you at every phase in a product's development: from consultation to design to production.

- Based on your requirements we develop the solution that is right for you with a cost-conscious and efficient attitude
- L\_\_\_\_ Customer specific hard & software for CAN communication
- └── We create your documentation ...
- L\_\_\_\_ carry out the training and familiarization ...
- L\_\_\_\_ and organize the manufacture

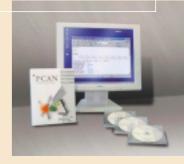
## PCAN products

#### Hardware

- L\_\_\_\_ CAN-PC interface modules
- L Digital and analog CAN microcontroller modules
- Left Hand-held devices for troubleshooting in CAN networks
- L\_\_\_\_ Converters for use in various Layer 1 applications
- L\_\_\_\_ Cable makeup to your requirements

## Software

- L CAN development systems for Windows® 9x / NT / 2000 / XP
- L CAN validation and diagnostic tools
- Control engineering applications
- └── Process visualization



## we do the rest

In your quest for new technologies and successful products, you need a partner you can rely on 100 percent.

PEAK-System Technik puts creative teams of experienced and highly-motivated specialists at your disposal, open to new ways, open to new solutions. Talk over your aims and objectives with us.

## Engineering on your behalf

From our experts: tailor-made developments...



## $\ldots$ for the automotive industry

## For example ...

- Simulation and controls for vehicle prototypes and concept cars
- Lectronics for the evaluation, control and safety of fuel-cell drives
- L\_\_\_\_ Vehicle instrument displays (speedo and entertainment simulation)
- Process measurement and control systems for small batch runs and prototypes
- Conboard microcomputers
- └── Prototype I/O connections



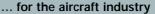
Whether you build vehicles for use on road, rail or in the air – whether you develop manufacturing plant and machinery or consumer goods – as specialists in fieldbus communication we support you from the very outset. And being perfectionists, we are never satisfied until your product is working absolutely perfectly.

## Project flow

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- \_\_\_\_ Current monitoring devices for Pitot tube heating
- \_\_\_\_ Customer-defined display systems
- LCD display activation
- \_\_\_\_ Diagnostic hardware and software

Cooperation: Sensor systems in the field of air safety are developed in collaboration with the OMF AIRCRAFT company.





## **OEM development**

One of our products fits your portfolio? Your development department is under pressure?

We have the ideal solution for you:

- L\_\_\_\_ Adaptation of our products to your specific needs
- L Available as customer OEM-product (your Logo, your case)
- Translation of your ideas into ready-to-manufacture products
- L\_\_\_\_ Advice and consultation on hardware and software development
- Fixed-price development on your behalf



Quality and safety: We have our own products and customer-specific OEM products produced in reputable manufacturing companies in Germany and throughout Europe



## Our PCAN products.

Whether you need a plug-in card for the PC, a microcontroller module for temperature recording, a program for monitoring your system or just the right kind of cable – with our CAN product range we can help you concentrate on what is important: developing successful products.

With sales of over 40,000 PC-CAN interfaces, PEAK-System Technik is one of the market leaders in the field of CAN-PC connections. Profit from our experience – profit from the quality of our CAN products.







## PCAN-PC software

- L\_\_\_\_ Support for all commonly-used Windows® operating systems
- Manuals in PDF format or as Windows<sup>®</sup> Help files
- All development systems complete with sample files for Delphi, C(++) and C#
- Product support and development support via hotline in Darmstadt, Germany
- Compatible with all PCAN-PC hardware
- L Customer-specific changes possible at any time

## P.20-30



## PCAN tools

- └── Helpful CAN accessories
- Leal for test layouts and small batch runs
- └── Special CAN cables supplied
- Special manufacture possible at any time
- └── PC/104 accessories

## Other products

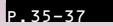
Enhance your PCAN hardware with software products from our partner companies:

- LabView Connection (KDI)
- └── OPC Server (inray)
- L QNX Driver (Bitctrl)

Optimize your development and manufacturing processes:

- L RepV maintenance management (IT-PEAK Networks)
- ProVer project time recording system (IT-PEAK Networks)

We have been successfully using these products ourselves for many years.



# 40,000 times over

 $P_{-}31 - 34$ 



## PCAN-USB

## PC USB to CAN interface

For easy and cost-effective integration into 2.0A and 2.0B CAN networks operating at a maximum baud rate of 1 Mbit/s. With its compact plastic casing, the USB-to-CAN converter is ideally suited for use with laptops and notebooks.

Software and in-house programming sources are supplied to make the package complete.

The USB-ISO version also includes optical decoupling. Built-in DC/DC converters and optical couplers provide electrical isolation to a maximum of 500 V between the PC and the CAN network.





Pin	Configuration
1	+12 V / +5 V / Not connected
2	CAN-L
3	CAN-GND / Not connected
4	Not connected
5	Not connected
6	CAN-GND / Not connected
7	CAN-H
8	Not connected
9	+12 V / +5 V / Not connected

## Specifications

- ∟ Baud rate settings up to 1 MBit/s
- PHILIPS SJA1000 CAN controller, 16 MHz clock frequency
- L 82C251 CAN transceiver
- L Compliant with CAN specifications 2.0A (11-bit ID) and 2.0B (29-bit ID)
- L\_\_\_\_ SJA1000 hardware can be reset via software
- L Supplied in space-saving plastic casing with USB cable to 9-pin DIN (CAN)
- CAN bus connection via Sub-D, 9-pin (to CiA DS102-1)

#### For PCAN-USB ISO only:

└── Electrical isolation to 500 V

## Ordering information

Designation	Art. No.
PCAN-USB	IPEH-002021
PCAN-USB ISO	IPEH-002022

- L Interface in compact plastic casing
- └── Voltage supply via USB bus
- PCAN-View CAN monitor for WIN 98/ME and 2000/XP
- L\_\_\_\_ Device drivers (sys, VxD) and interface DLL for Win 98/ME and 2000/XP
- L Diskette containing PCAN-Light software interface DLL for driving
- L Diskette containing sample program with source code in VB, Delphi and VC
- LINUX driver available at no cost
- └── Diskette containing manual in PDF format



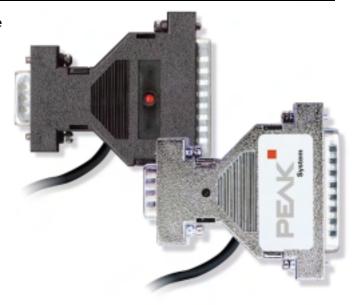
## PCAN-DONGLE

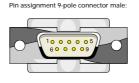
## PC parallel port to CAN interface

For easy and cost-effective integration into 2.0A and 2.0B CAN networks. With its compact connector casing, the parallel-to-CAN converter is ideally suited for use with laptops and notebooks. Depending on the parallel interface present, it can be operated in "Multiplex" or "Enhanced Parallel Port" mode.

Power is supplied to the PCAN-Dongle through a special adapter connected to the PC's keyboard output. Software and in-house programming sources are supplied to make the package complete.

The PCAN-Dongle ISO version also includes optical decoupling. Built-in DC/DC converters and optical couplers provide electrical isolation to a maximum of 500 V between the PC and the CAN network.





Pin	Configuration
1	+12V/+5V/Not connected
2	CAN-L
3	CAN-GND / Not connected
4	Not connected
5	Not connected
6	CAN-GND / Not connected
7	CAN-H
8	Not connected
9	+12 V / +5 V / Not connected

## **Specifications**

- ∟ Baud rate settings up to 1 MBit/s
- \_\_\_ PHILIPS SJA1000 CAN controller,16 MHz clock frequency
- └── 82C251 CAN transceiver
- Compliant with CAN specifications 2.0A (11-bit ID) and 2.0B (29-bit ID)
- └── SJA1000 hardware can be reset via software
- Logic control by means of integrated CPLD
- L\_\_\_\_\_ Supplied in space-saving port adapter casing DIN 25-pin (LPT) to DIN 9-pin (CAN)
- CAN bus connection via Sub-D, 9-pin (to CiA DS102-1)
- Software-driven switching from "Multiplex" to " EPP (Enhanced Parallel Port)" mode

## For PCAN-Dongle ISO only:

Electrical isolation to 500 V

## Ordering information

Designation	Art. No.
PCAN-Dongle PS/2	IPEH-002019
PCAN-Dongle PS/2 ISO	IPEH-002020
PCAN-Dongle DIN	IPEH-002015

#### Scope of supply

- └── Interface in port adapter casing
- └── Voltage adapter for PS/2 or DIN keyboard
- PCAN-View CAN monitor for WIN 9x/ME and NT/2000/XP
- └── CANView for DOS
- \_\_\_ Device drivers (sys, VxD) and interface DLL for WIN 9x/ME and NT/2000/XP
- Diskette containing PCAN-Light software interface DLL for driving
- L Diskette containing sample program with source code in VB, BB5 and VC
- LINUX driver incl. source code available at no cost
- L Diskette containing manual in PDF format



## PCAN-DONGLE PRO

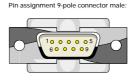
## PC parallel port to CAN interface with fully usable printer port

The bigger brother to the successful PCAN-Dongle enables cost-effective connection to existing CAN networks. This adapter is supplied in a connector casing and enables operation over any standard parallel PC port. It supports software-driven switching between printer mode and CAN mode.

Power is supplied to the PCAN-Dongle PRO through a special adapter connected to the PC's keyboard output. A jumper allows the Dongle Pro to be operated with either an "82C251" or an "82C252" transceiver. This makes it possible to operate the Dongle Pro on dual-wire or single-wire CAN systems.

The software supplied makes it a simple matter to install and use the dongle, and provides a very helpful means of monitoring CAN bus systems.





Pin	Configuration
1	+12 V / +5 V / Not connected
2	CAN-L
3	CAN-GND / Not connected
4	Not connected
5	Not connected
6	CAN-GND / Not connected
7	CAN-H
8	Not connected
9	+12 V / +5 V / Not connected

## **Specifications**

- ∟ Baud rate settings up to 1 Mbit/s.
- L\_\_\_\_ SJA1000 controller with 16 MHz clock frequency
- L\_\_\_\_ Compliant with CAN specifications 2.0A (Standard Frame) and 2.0B (Extended Frame)
- └── Single-wire compatible (transceiver 82C252)
- L\_\_\_\_ Transceivers 82C251 and 82C252 (via jumper)
- Logic control by means of integrated CPLD
- Less Supports all interrupt and port address settings on the parallel interface
- L The CAN controller can be reset via software
- L\_\_\_\_ Fully usable printer port
- Software-driven switching from "CAN" to "Print" mode
- Connection via 9-pin DIN assignment (to CiA DS102-1)
- Software-driven switching from "Multiplex" to "Enhanced Parallel Port" mode
- L Individually activated CAN bus supply voltage (5 V/12 V)

## **Ordering information**

Designation	Art. No.
PCAN-Dongle PRO PS/2	IPEH-002033
PCAN-Dongle PRO DIN	IPEH-002032

## Scope of supply

- └── Interface in port adapter casing
- └── Voltage adapter for PS/2 or DIN keyboard
- PCAN-View CAN monitor for WIN 9x/ME and NT/2000/XP
- └── CAN-View for DOS
- L Device drivers (sys, VxD) and interface DLL for WIN 9x/ME and NT/2000
- L Diskette containing PCAN-Light software interface DLL for driving
- L Diskette containing sample program with source code in VB, BB5 and VC
- Diskette containing manual in PDF format

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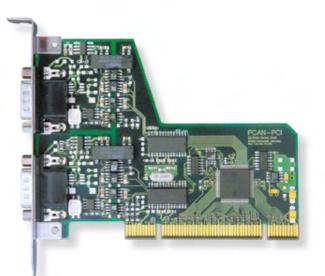


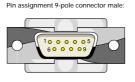
## PCAN-PCI

## PC-PCI to CAN interface

The PCAN-PCI card provides an inexpensive solution for connecting a CAN bus to a PC using a PCI bus system. There is no need to configure the card in order to adapt it to the PC, since the driver registers it automatically. The PCAN-PCI card package includes software for Windows<sup>®</sup> and sample sources for in-house programming. The card is equipped with the SJA1000 CAN controller and the 82C251 driver. Connection to the CAN bus is through a 9-pin Sub-D connector in which the pin assignment complies with CiA draft standard DS 102-1. The card is available in a single-channel or dual-channel version.

The PCAN-PCI ISO versions also include optical decoupling. Built-in DC/DC converters and optical couplers provide electrical isolation to a maximum of 500 V between the PC and the CAN network.





Pin	Configuration
1	+12 V / +5 V / Not connected
2	CAN-L
3	CAN-GND / Not connected
4	Not connected
5	Not connected
6	CAN-GND / Not connected
7	CAN-H
8	Not connected
9	+12V / +5V / Not connected

## Specifications

- └── Baud rate settings up to 1 Mbit/s
- └── PC plug-in card for PCI slot
- └── Fully PNP compliant
- L Philips SJA1000 CAN controller with 16 MHz clock frequency
- ∟ 82C251 CAN transceiver
- L\_\_\_\_\_ SMD technology for space-saving dimensions
- L\_\_\_\_ CAN bus connection via Sub-D, 9-pin (to CiA DS102-1)
- └── Hardware can be reset via software

## Optional:

- Electrical isolation to 500 V
- L Also available in a dual-channel version

## Ordering information

Designation	Art. No.
PCAN-PCI single-channel	IPEH-002064
PCAN-PCI dual-channel	IPEH-002065
PCAN-PCI single-channel ISO	IPEH-002066
PCAN-PCI dual-channel ISO	IPEH-002067

- PCAN-PCI card
- PCAN-View CAN monitor for WIN 9x/ME and NT/2000/XP
- L\_\_\_\_ Device drivers (sys, VxD) and interface DLL for WIN 9x/ME and NT/2000/XP
- L Diskette containing PCAN-Light software interface DLL for driving
- L Diskette containing sample program with source code in VB, Delphi and VC
- \_\_\_\_ LINUX driver incl. source code available at no cost
- └── Diskette containing manual in PDF format



## PCAN-ISA

## PC-ISA to CAN interface

For easy and cost-effective integration into 2.0A and 2.0B CAN networks. The PCAN-ISA II is a dual-channel CAN card for the ISA slot.

This card is also available in an optically decoupled version with a maximum separation voltage of up to 500 V. Both the individual CAN channels may be configured and operated independently of one another. For ease of installation the port addresses available to the user are 200H to 3A0 and the hardware interrupts are IRQ3, IRQ4, IRQ5, IRQ7, IRQ10, IRQ11, IRQ12 and IRQ15. They can be set by means of jumpers. Two Philips SJA1000 CAN controllers are used.

Software and in-house programming sources are supplied to make the package complete.





## **Specifications**

- └── PC plug-in card for 16-bit ISA slot
- L Choice of 14 port addresses and eight interrupts per channel
- Left Two independently configurable SJA1000 CAN controllers with 16 MHz clock frequency
- L 82C251 CAN transceiver
- L\_\_\_\_ CAN bus connection via Sub-D, 9-pin (to CiA DS102-1)
- L Data transfer rates up to 1 Mbit/s
- └── Hardware can be reset via software
- L\_\_\_\_ Multiple cards can be operated in parallel in a single PC (interrupt sharing)

## Optional:

- └── Electrical isolation to 500 V
- L\_\_\_\_ Also available in a dual-channel version

## Ordering information

Designation	Art. No.
PCAN-ISA single-channel	IPEH-002074
PCAN-ISA dual-channel	IPEH-002075
PCAN- ISA single-channel ISO	IPEH-002076
PCAN-ISA dual-channel ISO	IPEH-002077

- └── PC-ISA plug-in card
- PCAN-View CAN monitor for WIN 9x/ME and NT/2000/XP
- └── CAN-View for DOS
- Device drivers (sys, VxD) and interface DLL for WIN 9x/ME and NT/2000/XP
- L Diskette containing PCAN-Light software interface DLL for driving
- L\_\_\_\_ Diskette containing sample program with source code in VB, BB5 and VC
- LINUX driver incl. source code available at no cost
- └── Diskette containing manual in PDF format



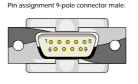
## <u>PCAN-PC/104</u>

## PC-PC/104 to CAN interface

The PCAN-PC/104 is a compact and powerful PC/104 CAN plug-in card which enables two CAN networks to be simultaneously networked with a PC/104 system. There is ample flexibility when configuring the card in order to adapt it to a PC/104 system, since there are 14 different port addresses and eight interrupt assignments from which to choose. Two Philips SJA1000 CAN controllers are used. For ease of installation the port addresses available to the user are 200H to 3A0 and the hardware interrupts are IRQ3, IRQ4, IRQ5, IRQ7, IRQ10, IRQ11, IRQ12 and IRQ15. They can be set by means of jumpers. Multiple PCAN-PC/104 cards can be operated without problem (interrupt sharing).

The PCAN-PC/104 card package includes software and sources for in-house programming.





Pin	Configuration
1	+12 V / +5 V / Not connected
2	CAN-L
3	CAN-GND / Not connected
4	Not connected
5	Not connected
6	CAN-GND / Not connected
7	CAN-H
8	Not connected
9	+12 V / +5 V / Not connected

## Specifications

- ∟ Baud rate settings up to 1 MBaud
- Left Two can be configured totally independently SJA1000 CAN controller with 16 MHz clock frequency
- └── 82C251 CAN transceiver
- L 100 % PC/104 compatible
- CAN bus connection via Sub-D, 9-pin (to CiA DS102-1)
- L Hardware can be reset via software
- L Multiple PC/104 cards can be operated in parallel (interrupt sharing)
- L\_\_\_\_ Choice of 14 different port addresses and eight different interrupt addresses

#### Optional:

- └── Electrical isolation to 500 V
- L\_\_\_\_ Also available in a dual-channel version

## Ordering information

Designation	Art. No.
PCAN-PC/104 single-channel	IPEH-002054
PCAN-PC/104 dual-channel	IPEH-002055
PCAN-PC/104 sgl-chan. ISO	IPEH-002056
PCAN-PC/104 dual-chan. ISO	IPEH-002057

- └── PC/104 plug-in card
- PCAN-View CAN monitor for WIN 9x/ME and NT/2000/XP
- └── CANView for DOS
- Device drivers (sys, VxD) and interface DLL for WIN 9x/ME and NT/2000/XP
- L Diskette containing PCAN-Light software interface DLL for driving
- L Diskette containing sample program with source code in VB, BB5 and VC
- LINUX driver incl. source code available at no cost
- └── Diskette containing manual in PDF format



## PCAN-LIN

## PC serial to LIN and CAN interfaces

The PCAN-LIN module enables CAN, LIN and serial users to communicate.

The module is supplied in a plastic casing and includes firmware which enables data to be exchanged between the different bus systems.

The various modules can be set up with the aid of configuration software. Then for instance the module acting as the LIN master can request data and send the incoming LIN data to the CAN bus and/or the serial interface.

The default bit rate for LIN is 19200 bps. Data from CAN is rerouted straight to LIN without offset (offset 0). The default bit rate for CAN is 500 Kbps.



Pin assignment 9-pole connector female



Pin	Configuration
1	NC (Reserved)
2	TxD (RS232-level)
3	RxD (RS232-level)
4	NC (Reserved)
5	Ground (GND)
6	NC (Reserved)
7	NC (Reserved)
8	NC (Reserved)
0	NC (Reconved)

Pin assignment 9-pole connector male



Pin	Configuration				
1	VBAT 8 -18 V (Imax ~ 130 mA)				
2	CAN-L				
3	Ground (GND)				
4	LIN Data				
5	NC (Reserved)				
6	Ground (GND)				
7	CAN-H				
8	NC (Reserved)				
9	NC (Reserved)				

#### Specifications

- Compliant with LIN Protocol Specification Rev. 1.2 (power management functions such as Sleep Mode and Wake Up Signal are NOT implemented)
- Electrical decoupling available between RS232 and CAN/LIN (maximum 1 kV, optional)
- Available for use as LIN slave or master/slave (no data conditioning when handling a scheduler list in LIN master mode)
- L General-purpose gateway (or router when using Acceptance Code/Acceptance Mask feature) from • RS232 to LIN (and back)
  - · RS2S2 to LIN (and back)
  - RS232 to CAN (and back)
    CAN to LIN (and back)
  - Individual LIN frames can be initiated via CAN or
  - RS232 when LIN Scheduler not active

#### Optional:

Handle a user-definable LIN-ID list (scheduler with limited number of entries, cyclic handling if required)

#### Ordering information

DesignationArt. No.PCAN-LIN - CAN-HighSpeedIPEH-002025PCAN-LIN - CAN-LowSpeedIPEH-002028

PCAN-LIN - CAN-HighSp. opto IPEH-002029

- L Interface in compact plastic casing
- └── Voltage supply 8 18 V
- L PCAN-LIN Config configuration and monitoring tool for WIN 98/ME and 2000/XP
- L Diskette containing manual in PDF format



## PCAN-LWL

## Optical coupler for CAN data transmission

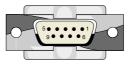
The PCAN-LWL package enables any CAN section to be replaced by an optical waveguide. The optical waveguide consists of a  $62.5/125 \ \mu m$  duplex fiber optical cable with ST connectors. Conversion can be to High Speed CAN or Low Speed CAN.

Areas of application include EMC measurements on CAN modules, CAN sub-sections with high electromagnetic irradiation and lines through areas protected against the risk of explosion.

The package supplied contains two modules complete with 5 meters of fiber optical cable including connectors. The modules require an external power supply and have a built-in power pack. They can also be powered by batteries. A suitable battery is available as an option.







Pin	Configuration
1	Not connected / 5 V Power supply
2	CAN-L
3	GND
4	Not connected
5	Not connected
6	Not connected
7	CAN-H
8	Not connected
9	8-30 V Power supply

## **Specifications**

- LED display for driver mode
- L High Speed CAN: PCA82C251 driver, bus termination 120 Ohm internal
- Low Speed CAN: TJA1054 driver, maximum 125 KBaud, bus termination reversible between 510 Ohm / 5.6 kOhm, bus-error display
- └── Aluminum profile casing
- CAN bus connection via Sub-D, 9-pin (to CiA DS102-1)
- └── Supply voltage: 6.5 30 V
- L\_\_\_\_\_ Supply via Sub-D 9-pin, or DC connector (jumper)
- ∟ Battery operation via external battery (7.2 V)

## Ordering information

Designation

Art. No.

PCAN-LWL

IPEH-002026

- L 2 pcs CAN optical waveguide converters
- L\_\_\_\_5 meters optical waveguide cable 62.5 / 125 μm duplex with ST connector
- Diskette containing manual in PDF format



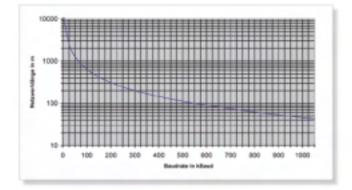
## PCAN-OPTOADAPTER

Plug-in adapter for decoupling CAN networks

The PCAN-Optoadapter is a general-purpose, plug-in optical adapter for electrically decoupling CAN bus systems.

Its integrated logic means that decoupling can be installed at any point in the CAN network.

The phase delays on the optical couplers mean that each optical adapter represents a virtual phase delay, depending on the baud rate (see graph).



## Specifications

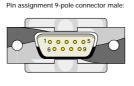
- Plug-in adapter for decoupling the CAN bus for PCAN-Dongle, PCAN-Dongle PRO, PCAN-PCI, PCAN-USB, PCAN-ISA and PCAN-PC/104
- L Optical decoupling and electrical isolation by DC/DC converters to 500 V
- ∟ Built-in CAN filter
- L\_\_\_\_ Transfer rates up to 1 MBaud
- L Philips 82C250 CAN transceiver
- L\_\_\_\_ CAN bus connection via Sub-D, 9-pin (to CiA DS102-1)
- PCAN-Dongle, PCAN-Dongle PRO, PCAN-PCI, PCAN-USB, PCAN-ISA and PCAN-PC/104 can be set up on the necessary supply voltage settings

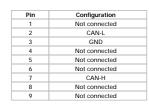


Pin assignment 9-pole connector female



	Pin	Configuration				
	1	5 V Power supply / Not connected				
	2	CAN-L				
	3	GND				
	4	Not connected				
- [	5	Not connected				
- [	6	Not connected				
- [	7	CAN-H				
- [	8	Not connected				
- Г	9	Not connected / 5 V Power supply				





#### Ordering information

**Designation** PCAN-Optoadapter Art. No.

IPEH-002038

## Scope of supply

└── Adapter in plastic casing

∟\_\_ Manual



## PCAN-TJA AND PCAN-AU

Bus converter module

Bus converters enable CAN High Speed components (based on Philips PCA82C250, PCA82C251 and TJA1050 transceivers), such as PCAN-USB or a PCAN-PCI card, to be connected to Low Speed CAN bus systems. The PCAN-AU579 has been developed for the Phillips AU5790 transceiver and the PCAN-TJA1054 has been developed for the PCA82C252, TJA1053 and TJA1054 transceivers.

The bus converter receives its 5 V supply via pin 1 of the 9-pin D-Sub connector. A slide switch allows the termination resistors on the TJA1054 interface to be switched between 0.56 and 5.66 kOhm. An error LED displays the error output from the Low Speed CAN transceiver (TJA 1054).

The AU5790 can be switched between the various operating modes by means of a slide switch mounted on one side

Note: The TJA1054 Low Speed transceiver always runs in normal operating mode. It cannot be switched to Sleep mode or Standby mode.

## **Specifications**

- Adapter from High Speed CAN (PCA82C251) to Low Speed CAN (TJA1054 or AU5790)
- └── Transfer rates up to 125 KBaud
- L\_\_\_\_ Termination resistors for Low Speed CAN (TJA1054) can be switched (560 Ohm/5.66 kOhm)
- └── Operating modes can be switched (AU5790)
- Power LED, error LED (TJA1054), operating mode LED (AU5790)
- L\_\_\_\_ CAN bus connection via Sub-D, 9-pin (to CiA DS102-1)
- L CAN cards can be set to the necessary supply voltage with the aid of solder jumpers



Pin assignment 9-pole connector female Connection side 82C251 (or 82C250)



Pin	Configuration
1	5 V Power supply
2	CAN-L
3	GND
4	Not connected
5	Not connected
6	GND
7	CAN-H
8	Not connected
9	Not connected

Pin assignment 9-pole connector male Connection side TJA 1054



9	Not connected		
Pin	Configuration		
1	Not connected		
2	CAN-L		
3	GND		
4	Not connected		
5	Not connected		
6	GND		
7	CAN-H		
8	Not connected		

Not connected

Designation	Art. No.
PCAN-TJA1054	IPEH-002
PCAN-AU5790	IPEH-002

EH-002039 EH-002040

## Scope of supply

L\_\_\_\_ Adapter in plastic casing ∟\_\_ Manual

Other transceiver types on request



## PCAN-SLIO

## Digital I/O module with CAN interface

The PCAN-Slio module makes simplifies connection to digital I/Os using the CAN interface. This module can be used when migrating existing systems to CAN bus connection and when implementing CAN I/Os in new systems. Thanks to its easy programming and the simultaneous use of different modules in a single network, implementation is problem-free.

The "in-system programmable" microchip microcontroller PIC-16C84 also offers provides ambitious programmers with facilities for writing their own firmware with the help of optional tools.

The eight open-collector outputs from the motherboard can be used for purposes such as directly controlling relays. The eight inputs are TTL compatible. A range of CAN commands can be used to configure and control the module remotely from another CAN node or host computer.



IN 1	1	2	IN 2
IN 3	3	4	IN 4
IN 5	5	6	IN 6
IN 7	7	8	IN 8
IN 9	9	10	GND

5 V	1	2	GND
OUT 1	3	4	OUT 2
OUT 3	5	6	OUT 4
OUT 5	7	8	OUT 6
OUT 7	9	10	OUT 8
COM	11	12	GND
CAN H	13	14	CAN L

Imput connector

Output connector

## Specifications

- L CAN baud rate up to 1 MBaud
- Eight TTL inputs
- Eight TTL outputs
- Outputs with up to 0.5 A/50 V per channel (performance enhancement by parallel connection of outputs)
- └── Supply voltage: 7 30 V DC
- └── Facility to configure CAN Message IDs

#### Ordering information

Designation PCAN-Slio Art. No.

IPEH-002018

- PCAN-Slio module One motherboard configured and tested
- L Diskette containing manual and connection diagram as a PDF file



## PCAN-MICROMOD

## General purpose I/O module with CAN interface

The integrated firmware enables the microcontroller board to configure the hardware by a simple procedure using a Windows<sup>®</sup> program. No knowledge of programming is required. The configuration data is sent to the module via CAN. Each module can be individually addressed and parameterized via the bus. Expandable with a range of different motherboards, the module can be used in the building of hardware and equipment or in the automotive industry. An optional evaluation board simplifies the enhancement and development of custom boards.

The module is supplied inclusive of Windows<sup>®</sup> compatible software and makes the following facilities available:

- Let The digital input levels can send periodically or on a change of level
- L Digital inputs can be logically linked
- L Adaptations of analog quantities via characteristic curves
- └── Direct conversion from analog inputs to CAN IDs
- Direct rotary encoder support (rotary switches, motor vehicles)

## Specifications, PCAN-MicroMod

- L\_\_\_\_ Eight analog inputs 10-bit Vref 5 V
- Eight digital inputs
- Eight digital outputs
- En Four PWM/frequency outputs in the range 1 Hz 20 kHz
- L\_\_\_\_ Fully configurable via Windows® compatible PC software
- Maximum of 64 MicroMods in one CAN network
- Dimensions: 32 x 36 mm

## Specifications, PCAN-MicroMod Evaluation Board

- Open collector output driver for digital outputs and CMOS PWM outputs
- └── Protected digital inputs + LED
- └── Potentiometers for analog inputs
- Low pass and resistive divider for voltages > 5 V
- Serial interface for flash download
- Low Speed CAN transceiver with equipment options
- L Dimensions: approx. 100 x 100 mm





#### Ordering information

Designation	Art. No.
PCAN-MicroMod	IPEH-002080
PCAN-MicroMod Evaluation Kit	IPEH-002081

#### Scope of supply, PCAN-MicroMod

- L PCAN-MicroMod motherboard configured and tested
- L Diskette containing manual and connection diagram as a PDF file

#### Scope of supply, PCAN-MicroMod Evaluation Kit

- L PCAN-Dongle PS/2, MicroMod Evaluation Board, MicroMod CPU motherboard
- └── Power supply unit, CAN cable (1 m)
- L Diskette containing MicroMod configuration software

Various motherboards available. Please ask for list.

## www.peak- Distribución: ER-SOFT, S.A. Email: er@er-soft.com, Tel: +34 916 408 408

## The right software...

... for your CAN bus application

Windows® 95/98/ME

Windows® NT/2000/XP

Supports all PCAN-PC hardware

Multiple programs on one driver

CAN communication between programs

Maximum number of supported hardware devices per driver

Maximum number of programs per hardware device

Advanced hardware status information

Real time accuracy of the outgoing (1) and incoming messages (2)

Time information transferred to driver

Event on receipt of a message

Internal message buffer on driver per program

Software simulation between programs (no hardware needed for development)

One interface for all PCAN-PC cards

Hotline support for developers

Hardware configuration via Control Panel

Hardware reset from within the application

Message filter user-definable

Software-driven gateway function between two hardware units

Driver licensing

Applications included in package

Distribución: ER-SOFT, S.A. Email: er@er-soft.com, Tel: +34 916 408 408



PCAN- Light	PCAN- Evaluation	PCAN- Developer
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– (Task performed in application)		
– (in CAN_Init only)	- 1	1 C C C C C C C C C C C C C C C C C C C
– (always fully open)	One filter per application	One filter per application
		1 C C C C C C C C C C C C C C C C C C C
-	5 licenses in package, others may be acquired others may be acquired	Unlimited
PCAN-View	PCAN-View, PCAN-Stat, PCAN-Config	<ul> <li>PCAN-View, PCAN-Stat,</li> <li>PCAN-Config, PCAN-Explorer,</li> <li>PCAN-Trace</li> </ul>



## PCAN-VIEW

Windows® compatible software for displaying CAN messages

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PCAN-View for Windows<sup>®</sup> is included in every PCAN-PC hardware package and is a CAN monitor which enables CAN messages to be viewed in conjunction with the PCAN-PC adapter.

The program enables CAN messages to be sent and received simultaneously at a sampling rate of 1 ms (Win 9x/ME) / 10 ms (Win 2000/XP). It supports the CAN specifications 2.0A and 2.0B at a maximum baud rate of 1 Mbit/s. Messages can be sent manually and periodically. Bus system errors and memory overflows in the CAN hardware being controlled are displayed.

PCAN-View is the basic version of the program PCAN-Explorer for Windows<sup>®</sup>.

## Specifications

- Least Variable baud rate settings up to 1 Mbit/s
- L\_\_\_\_\_ Support for CAN specifications 2.0A and 2.0B
- CAN controller hardware reset (SJA1000)
- L\_\_\_\_ Incoming, outgoing and error status display

## Ordering information

Designation	Art. No.
PCAN-View Windows®	Internet*
*) Download/Internet: ftp://www.peak-system.	.com
Scope of supply	

## Left Installation routine for all commonly-used Windows® operating systems

└── Online Help in Windows® format

The current version of PCAN-View ...

- ... can be found on the installation diskettes for our PC hardware
- ... can be found on the Internet as a free download ready and waiting for you



## PCAN-LIGHT

## Driver collection for Windows® and Linux

## PCAN-Light ...

... is a range of drivers for the operating systems Win9x/ME and Windows® NT/2000/XP. PCAN-Light consists of the actual Ring-0 driver, and an interface DLL which provides the API functions. You can

use the PCAN-Light API to create your own applications for communicating with the PCAN-PC hardware.

## PCAN-Light API

PCAN-Light provides developers of C/C++, Delphi, VB etc. with the following functions:

CAN_Init:	Initializing hardware, setting the baud rate, logging on to drivers
CAN_Close:	Logging out of drivers
CAN_Write:	Sending a CAN message (11/29-bit ID and RTR available)
CAN_Read:	Reading a CAN message / status
CAN_Status:	Reading driver status information (data in buffer, overruns etc.)
CAN_VersionInfo:	Fetching the driver information / version number

## The PCAN-Light Linux files ...

... can be found at http://www.peak-system.com/linux as an RPM package and a GZ download.

The Linux version of the device driver is obtainable as source code for PCAN-Dongle, PCAN-PCI, PCAN-PC/104 and PCAN-ISA.

Libs are available for the PCAN-USB hardware.



Ordering information		
Designation	Art. No.	
PCAN-Light Windows®	Internet*	
PCAN-Light Linux	Internet*	
*) Download/Internet: ftp://www.peak-syste	m.com	

## Scope of supply

- Length Installation routine for all commonly-used Windows® operating systems
- └── Online Help in Windows® format

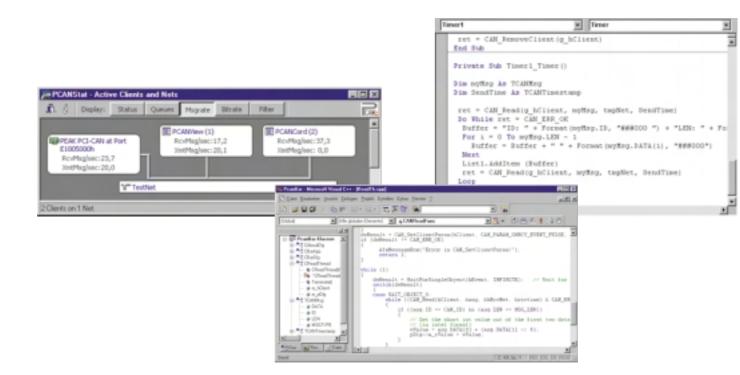
The current version of PCAN- Light ...

- ... can be found on the installation diskettes for our PC hardware
- ... can be found on the Internet as a free download ready and waiting for you



## PCAN-DEVELOPER /-EVALUATION

CAN development packages for Windows<sup>®</sup> 9x/ME/NT/2000 and XP



PCAN is a flexible system for planning, developing and applying CAN networks. The basis of communication from PCs to external hardware over a CAN bus is the Windows<sup>®</sup> Ring-0 driver (VxD/SYS). This forms the core of a complete CAN network environment on a PC running Windows<sup>®</sup>. The device driver manages the whole of the data traffic for all the hardware connected to the PC. The interface to the user or operator of a hardware device which is connected to a CAN network is formed by what are known as PCAN clients. These enable process quantities to be displayed and influenced as necessary. The driver allows multiple clients to be connected, and these are able to communicate with CAN buses. It also supports multiple hardware components based on an SJA1000.

The following features apply to PCAN client programs, networks and hardware:

- L A client can be connected to more than one network
- L A network supports multiple clients
- L A hardware device belongs to one network only

- A network may have exactly one hardware device assigned to it, or none at all
- When a client sends, the message is passed via the hardware to the external bus and then to all the other clients
- Left a message is received via the hardware, it is received by all clients
- Defining the installed hardware and networks. Multiple networks may be defined per hardware device

The CanApi 2 Interface DLL enables software developers to use these features.

Additional features in the PCAN-Developer package are the unlimited number of device driver licenses for marketing departments that have their own developments in-house (clients), as well as the CAN monitor PCAN-Explorer and the PCAN-Trace data logger which are included in the items supplied. Your development team can also use our support hotline free of charge.

## www.peak- Distribución: ER-SOFT, S.A. Email: er@er-soft.com, Tel: +34 916 408 408



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PEAK Dongle-CAN EPP at address 378h	
PEAK PCI-CAN at address E1005000h	
- TestNet	

#### Features

- L 32-bit Windows® compatible DLL as programming interface (API)
- \_ Interrupt-driven receipt of CAN messages from the hardware into a FIFO buffer within the driver, complete with time stamp
- L Receipt of CAN messages between the driver and the Windows® application can be event-oriented
- \_\_\_ Support for CAN protocol 2.0A and 2.0B L (29-bit identifier)
- Comprehensive programming manual (Help file) complet with fully compatible sample source code
- L\_\_\_\_ Transmission accurately timed by transferring the required time coordinates from the application to the system driver (shoot and forget)
- Comprehensive toolkit for configuring, parameterizing and visualizing the CAN system

1014

Designation	Art. No.
PCAN-Developer	IPES-002070
PCAN-Evaluation	IPES-002071

- Program description as Windows Help File (CD)
- L Header files, units and examples on data media
- L Tools: PCAN-CPL, PCAN-NetConfig and PCAN-Stat
- └── Applications: PCAN-View
- └── 5 licenses for device drivers (PCAN-Evaluation package only)
- PCAN-Trace, PCAN-Explorer and Free-License driver on CD (PCAN-Developer only)



## PCAN-EXPLORER 3

The comprehensive CAN monitor for Windows®

PCAN-Explorer is a general-purpose monitor for overseeing the data traffic on a CAN network. Individual messages can be provided with dedicated identifiers (symbols) to simplify their allocation. There is integral support for Visual Basic Script, making it an easy matter to create custom tools for the CAN bus. The integrated data logger can receive and record the data traffic on the bus. PCAN-Explorer 3 takes the form of an automation server. COM objects can be addressed via dual interfaces, meaning that access is possible via the IDispatch interface or a COM interface.

## Features

- L Displaying all incoming messages complete with ID, length and data bytes
- Displaying incoming remote frames complete with number and receive gap
- L\_\_\_\_ Any number of messages can be included in a transmit list and sent at fixed intervals, manually or in response to a remote frame
- Saving and retrieving created transmit lists in order to emulate different CAN nodes
- L CAN bus and controller errors are displayed along with error frame counters
- Symbolic representation of messages by allocation of identifiers
- Symbolic representation of data within data bytes by flagging of bit groups and allocation of identifiers and data types combined with scaling and offset
- L Displaying incoming symbols by message ID, gualifier byte and variable
- \_ Support for float data types in accordance with IEEE754, byte sequences in Intel and Motorola format, and Enum
- Configurable, integrated data logger
- └── Function keys can be assigned individual transmit messages or macros
- Macro creation in Visual Basic Script, integrated editor

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- └── Macros can access all program elements via the PCAN-Explorer object model
- └── Easy integration of external tools
- L Integration of add-ins for enhanced functionality, e.g. stripchart (which is included as standard)
- Browser for networks, active symbols, symbol files, macros etc.
- Logging of timeouts

Ordering information	
Designation	Art. No.
PCAN-Explorer 3	IPES-002028
Scope of supply	

- PCAN-Explorer 3 installation CD incl. PCAN-Explorer AddIn Line Light (in English)
- └── Documentation in CHM format

Examples for creating custom plug-ins, free of charge on request to: support@peak-system.com



## PCAN-EXPLORER PLUG INS

## Optional function enhancements for PCAN-Explorer

## Plotter (PCAN-Explorer plug-in)

One such enhancement to PCAN-Explorer is PCAN-Plotter. This stripchart enables the graphical representation of CAN data using any number of channels.

## Features

- L Unlimited number of channels
- L Unlimited number of Y-axes
- L X-axis and Y-axis may be zoomed and scrolled quite freely, even during recording
- └── Facility for automatic adaptation of axes to plots
- ∟ Reversible Y-axes
- Logarithmic scales
- └── Comments may be added
- L Cursor display for plot measurement

## L Export to EMF, BMP, JPG graphical formats

- Data import from the PCAN-Explorer Tracer
- ∟ Real time display

System requirements: PCAN-Explorer Version 3.x or higher Windows® 98/ME/NT/2000/XP Minimum 64 MB RAM

## Ordering information

#### Designation

Plotter

Art. No.

## IPES-002087

## Scope of supply

- CD containing PCAN-Plotter software
- └── Manual in PDF file format

## CANdb-Import (PCAN-Explorer plug-in)

PCAN CANdb-Import enables CANdb files to be loaded. This is useful for anyone not wishing to rewrite their database by hand in Sym format.

## Features

- └── Open CANdb files
- └── Select individual messages from an CANdb file
- Save the configuration data (CANdb file name and filter)
- Export in PCAN-Sym format

## System requirements:

PCAN-Explorer Version 3.x or higher Windows® 98/ME/NT/2000/XP Minimum 64 MB RAM

## Ordering informatio

## **Designation** CANdb-Import

Art. No.

## Scope of supply

L PCAN CANdb-Import software

└── Manual in PDF file format

## UserPanel (PCAN-Explorer plug-in)

The PCAN UserPanel plug-in enables the graphical representation of information in the form of analog and digital display instruments. The integral potentiometers, switches and slide controllers can even be used to generate signals on the bus.

## Features

- Unrestricted representation of analog and digital I/O units
- └── User-definable instrument positioning
- Complete configurations may be saved

System requirements:

PCAN-Explorer Version 3.x or higher Windows® 98/ME/NT/2000/XP Minimum 64 MB RAM

## Ordering information

## **Designation** UserPanel

Art. No.

## Scope of supply

PCAN UserPanel software

- \_\_ Manual in PDF file format
- Distribución: ER-SOFT, S.A. Email: er@er-soft.com, Tel: +34 916 408 408



## PCAN-TRACE

## Comprehensive data logger for CAN messages

The PCAN-Trace program is a data logger for up to 9,999,000 CAN messages. It enables CAN messages to be quickly recorded, saved and even played back on the CAN bus. The program meanwhile displays not only the number of messages received but also the message types (data frame, error, RTR frame).

PCAN-Trace runs within Windows® 9x/ME/NT/2000 and XP.

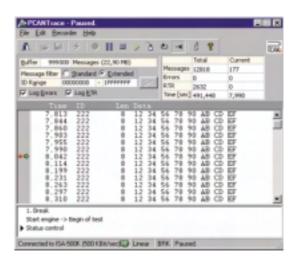
CAN messages can be received and played back in linear or circular mode. As you would expect, PCAN-Trace also provides an option to play back CAN messages in singlestep mode. You can also simplify analysis and tracing by setting playback mode breakpoints.

## Features

- Log facility for up to 9,999,000 CAN messages
- L Choice of linear buffer or ring buffer (in receive and playback mode)
- L\_\_\_\_ Displays type and number of CAN messages received
- L\_\_\_\_ Adjustable message filter
- └── Support for 11-bit and 29-bit IDs
- L Facility to play back CAN messages that have been recorded with the aid of PCAN-Explorer or PCAN-Cord, even in single-step mode
- Breakpoints can be used in playback mode
- L\_\_\_\_ Integrated online Help
- L Received data can also be viewed in a text editor

System requirements:

Windows® 98/ME/NT/2000 and XP Pentium 500 MHz 64 MB RAM 8 MB free hard disk space



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25,004 10,963	Status control Demo	Renove al
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		Close
P Enable Bre	alipoints	🕚 Heb

## Ordering information

Designation PCAN-Trace Art. No.

- PCAN-Trace installation CD (in English)
  - Documentation in CHM format



## PCAN-OPEN MAGIC

## CAN-Open configuration software

## PCAN-Open Magic ...

has been developed by the Embedded System Academy and supports the full PEAK-System Technik PC hardware range. PCAN-Open Magic makes it possible to analyze and configure CAN-Open networks. Individual CAN-Open nodes can be reprogrammed, calibrated or configured with the aid of PCAN-Open Magic.

Download and upload facilities are available.

The trace display enables SDO data to be displayed during communication with the nodes. This display is filter-selectable and is used for troubleshooting in CAN-Open networks. The integrated Command Line mode enables networks to be batch programmed using command line parameters.

This function can also be called by user-defined applications.

## Features

- └── Software for Windows®
- └── Trace display with filter properties
- └── Batch mode for network configuration
- L Data upload and download to CAN-Open nodes
- L\_\_\_\_ Status display for individual nodes
- L\_\_\_\_ Display showing bus loading, errors and traffic

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# Ordering information Designation

PCAN-Open Magic Demo Vers. Internet\* PCAN-Open Magic IPES-002085

Art. No.

\*) Download/Internet:

ftp://www.peak-system.com

## Scope of supply

CD containing PCAN-Open Magic software \*\*

└── Manual in PDF format \*\*

\*\*) Support from the Embedded System Academy only (www.esacademy.com)



## CANVIEW DOS and CANMON DOS

CAN monitor for DOS

A clear display of the data sent over a CAN bus is an important tool for tracing errors and checking out new systems. By assigning symbolic identifiers (CANMON) you can give the display greater clarity and speed up the troubleshooting process. CANMON for DOS enables all the activities on a CAN bus connected to the PC to be clearly displayed. Your "old" PCs can be used as highly adequate CAN monitors.

The CAN-View for Windows<sup>®</sup> program corresponds to the CANMON version without the symbolic data display. CAN-View can be obtained free of charge from www.peak-system.com and is included in the items supplied with PCAN-Dongle, PCAN-Dongle PRO, PCAN-ISA and PCAN-PC/104.

## Features

- L Variable baud rate settings up to 1 MBaud
- Controller hardware reset using the Esc key
- Easy to view thanks to simultaneously displayed incoming, outgoing and error windows
- Symbolic representation of CAN message data content (CANMON only)
- Online Help can be called at any time by pressing the F1 key
- Receive and transmit times displayed to an accuracy of 1 ms
- └── Definable receive filters
- Protocol log file can be created (CANMON only)
- Message transmission (manual, periodic, time-controlled)
- L\_\_\_\_ Definable Remote Request messages
- Will run on PCs from 80286 or higher with 640 KB RAM
- L Support for hardware used with PCAN-Dongle, PCAN-ISA, PCAN-PC/104 and PCAN-Dongle-PRO

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#### Ordering information

Designation	Art. No.
CAN-View DOS	Internet*
CANMON DOS	IPFS-002000

\*) Download/Internet: ftp://www.peak-system.com

## Scope of supply for CANMON DOS

- L Diskette containing CANMON DOS
- L Manual in DIN A5 slip-case (CANMON only)
- └── Online Help



## PCAN-HANDY

## Rugged hand-held device for displaying CAN data

The PCAN-Handy is a general-purpose, graphics-capable control terminal for connecting to the CAN bus. The PCAN-Handy enables the system to be monitored and amended with ease and precision. Its compact dimensions and rugged design make it ideally suited for working on site.

The back-lit display is clear and legible even in the most unfavorable conditions.

Programming the PCAN-Handy and then downloading its software require the use of a PC together with its associated software and hardware (CanSymEd and PCAN-Dongle).

Messages are displayed complete with ID, length, data bytes and transmit gap. To simplify the allocation of messages, they can be provided with symbols as synonyms for the data bytes. The data logger can record the data traffic on the CAN bus and save this data for analysis on the PC at a later time.

## Specifications

- Compact dimensions (W x L x D) 101 x 165 x 32 mm
- └── Pressure-sensitive keypad
- Back-lit graphical display with 128 x 64 pixels
- Software-controlled contrast adjustment
- L Maximum CAN baud rate 1 Mbit/s
- L\_\_\_\_\_ 16 KB serial EPROM
- L\_\_\_\_ 64 KB RAM
- L\_\_\_\_ 128 kB FLASH RAM
- SABC515C CPU
- └── Supply voltage: 10 30 V
- L CAN connection via 7-pin DIN-connector
- Log buffer (linear/circular) for 800 messages
- L 10 editable transmit messages (11-bit identifier)
- L\_\_\_\_\_ 10 user-selectable log messages
- └── Upload logged data to a PC
- └── Import 40 symbol variables



Hex	RCV/TRM
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## Ordering information

Designation	Art. No.
PCAN-Handy	IPEH-002058
PCAN-Handy package	IPEH-002059

## Scope of supply

PCAN-Handy (without PCAN-Dongle and software):

└── PCAN-Handy hardware

PCAN-Handy package

(incl. software for Windows® and PCAN-Dongle):

- L PCAN-Handy hardware
- L PCAN-Dongle (with DIN or PS/2 connection)
- └── CanSymEd software for Windows<sup>®</sup>
- └── Manual in PDF format



# PCAN ACCESSORIES

## PCAN cable 1 + 2

CAN connecting cable

- 9-pin Sub-D sockets (to CiA DS102-1) at both ends
- Length 2.0 m

PCAN cable 1 Without termination resistors

PCAN cable 2 With 120 Ohm termination resistors

## Ordering information

Designation	Art. No.
PCAN cable 1	IPEK-003000
PCAN cable 2	IPEK-003001

Other lengths on request



## PCAN-Term

CAN termination adapter

- 9-pin Sub-D socket to 9-pin Sub-D connector (to CiA DS102-1)
- └── With 120 Ohm termination resistor

#### Ordering information

Designation PCAN-Term Art. No.



#### Ordering information

Designation	
PCAN cable OBD-2	

Art. No.

Other lengths on request



## PCAN-T-Adapter

T-adapter CAN tapping switch

- 9-pin Sub-D socket to 9-pin Sub-D connector and Sub-D socket (to CiA DS102-1)
- \_\_\_\_ Unterminated

Ordering	information

Designation PCAN-T-Adapter Art. No.

Special cable makeup on request

Special cable makeup on request

www.peak- Distribución: ER-SOFT, S.A. Email: er@er-soft.com, Tel: +34 916 408 408



## PCAN POWER PACK MODULES

## PC/104 compatible power packs

The switch-mode power packs in the PC/104 Power range provide safe and reliable current and voltage supplies for modern embedded systems in stationary and (auto)mobile applications. These switch-mode power packs deliver a maximum output current of 5 A at an output voltage of 5 V. The connected hardware is protected by means of an overvoltage protection which is triggered in the event of an increase in the output voltage. The input voltage range of the PC/104 Power is 9 - 35 V. The power pack designed specifically for applications requiring the extended 9 - 55 V input range is the PC/104 Power II. Both versions of the card are also available with digital inputs.

The power packs can be switched on in two different ways, and can be switched off by software. In addition the power packs have a temperature-dependent PWM output which is used for connecting up PC ventilation fans (max. 200 mA).

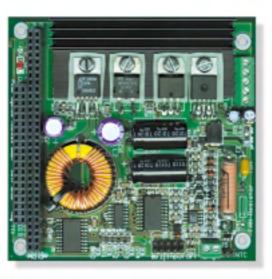
The versions with a digital interface also have a temperature monitor in addition to their six digital inputs.

## Specifications

- L PC/104 switch-mode power pack with max. 5 A output current at an output voltage of 5 V
- L\_\_\_\_ Input voltage range: 9 35 V (9 55 V for the PC/104 Power II versions)
- Length Integrated protective circuit in the event of defective output voltage
- Length Integrated temperature-dependent PWM output for ventilator fan hookup
- L Choice of two different startup modes

#### Digital versions only:

- Software-driven power-down available
- L Temperature monitor and six digital inputs available
- Level Necessary software available as interface DLL and ActiveX components from our web site



#### Ordering information

Designation	Art. No.
PCAN-PC/104 Power	IPEH-002070
PCAN-PC/104 Power Digi	IPEH-002071
PCAN-PC/104 Power II	IPEH-002072
PCAN-PC/104 Power II Digi	IPEH-002073

- L PC/104 Power system module
- ∟\_\_ Manual



## PCAN-ISA-PC/104 ADAPTER

Test interface for PC/104 cards

With the help of this adapter it is also possible to use and operate PC/104 cards in PCs with an ISA slot. Naturally you can also use the adapter to operate multiple PC/104 cards by plugging them in one above the other. You can use screw terminals to tap into the various voltage supplies on the card (+5 V, -5 V, +12 V, -12 V and GND), while four control LEDs display the status. The contacts for the multipoint connector on the PC/104 bus are also fed out on the underside of the motherboard.



## Specifications

- L Two-layer motherboard with gold plated ISA contacts
- L\_\_\_\_ PC voltages may be tapped via screw terminals
- LED status display
- L\_\_\_\_ PC/104 contacts fed out on the motherboard backplane

## dering information

Designation	Art. No.
PCAN-ISA - PC/104 adapter	IPEH-002078

## Scope of supply

L\_\_\_\_ ISA-PC/104 adapter



## AUXTITARY PRODUCTS

## **OPC-Server**

The inray GmbH company provides an OPC server which makes data from the CAN bus available for OPC clients in conjunction with our PCAN dongles.

## Features

- └── OPC Server enables the configuration of its variables to be taken from a vector database The variable tree, which can be browsed via OPC, then contains all configured signals
- \_\_\_\_ The inMOVE visualization feature enables data to be represented as a dynamic display in the Internet Explorer, for example
- L Variable values are extracted from the incoming CAN messages
- \_ OPC Server thus offers greater flexibility when carrying out configuration

#### **QNX Driver**

Having developed QNX Driver for PCAN cards, the BitCtrl company is in a position to offer you these components as a package. The following cards are currently supported:

- \_\_ PCAN-ISA (all variants)
- PCAN- PC/104 (all variants)
- PCAN-PCI (all variants)

The CAN interface is implemented as the resource manager in OS QNX 6.x. The functionality of the CAN resource manager is comparable with that of a corresponding serial device driver running within other UNIX operating systems.

## LabView Driver

The KDI-Digital Instrumentation company offers LabView Driver for PCAN development environments. It supports PCAN-Light, PCAN-Developer and PCAN-Evaluation.

#### Features

- └── No familiarization time, since C header files (\*.h) no longer need to be read and so the associated DLL calls are no longer required
- L Interface cards and adapters are available for these drivers, and are all compatible with the same calls (parallel, ISA, PCI, PC-104, USB etc.)
- \_\_ Simplified configuration in LabView via the functions Create-control or Create-constant

Designation	Manufacturer
OPC Connection	inray GmbH

For further information please visit www.inray.de

Designation	Manufacturer
LabView Driver	KDI-Digital Instrumentation

For further information please visit

www.digital-instrumentation.com

Designation	Manufacturer
QNX Driver	BitCtrl
For further information pleas	o visit

For further information please visit www.bitctrl.de



## <u>REPV 2001</u>

Windows®-based maintenance management

RepV 2001 is the ideal software solution for processing service orders. You can use this software to capture and manage incoming service orders.

It gives you a continuous overview of your service operation, and the order status feature means you are always in a position to give your customers current information. Thanks to the integrated master data management system you have access to all your customer data at the touch of a button. With the master data management feature you can capture and manage all aspects of your customer data, including contacts, locations, devices, serial numbers, and even the machinery and equipment to which the devices belong.

RepV 2001 is purpose-designed for the requirements of service providers. Their complex service and customer structures are therefore exactly mapped in order to do justice to the requirements of day-to-day work.

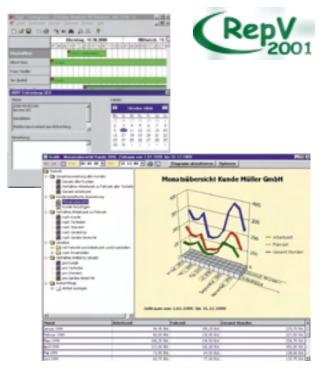


## Features

- L Hotline module: for capturing service orders
- L\_\_\_\_ Time scheduling module: for order planning
- Maintenance contract module: for time optimization
- L\_\_\_\_ Service interim aid module: you retain a full overview
- L\_\_\_\_ Statistics module: analyzes and evaluates your service operation
- L\_\_\_\_ Technician module: for data capture on the move
- L Data links available to SAP R3 etc.
- └── User-designed service reports

System requirements: Windows® 98/ME/2000/XP Microsoft SQL Server and Sage KHK Office Line

For further information please visit www.repv.de



#### Ordering information

Designation	Manufacturer
RepV	IT-PEAK Networks GmbH

RepV is a product of our sister company IT-PEAK Networks and we are currently using it with great success.

For further information please visit

www.peak-networks.de



www.peak- Distribución: ER-SOFT, S.A. Email: er@er-soft.com, Tel: +34 916 408 408



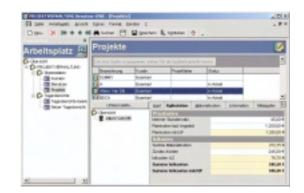
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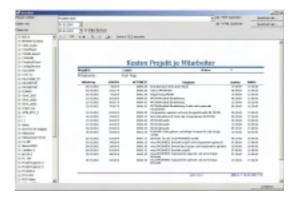
## Windows®-based project management

Project management is a very effective and simple method of controlling project costs. The basic data used to create all projects includes information on calculated costs, the associated personnel, internal hourly rates, contacts, etc.

The personnel themselves input information on an ongoing basis in the form of daily reports. As a result you have an overview of the status of individual projects and the associated costs to date.

A user access rights management feature ensures that personnel only have access to the data that concerns them individually.





## Features

- L Management of customers, personnel and projects
- L Daily data input with any number of entries

## Analysis of ...

- └── Project costs over time
- └── Personnel costs per project
- L\_\_\_\_ Total costs per project

System requirements: Windows® 98/ME/2000/XP Microsoft SQL Server

Ordering information		
Designation	Manufacturer	
ProM	IT-PEAK Networks GmbH	
Scope of supply		
Installation routine for all commonly-used Windows <sup>®</sup> operating systems		
Conline Help in Windows® format.		

ProM is a product of our sister company IT-PEAK Networks and we are currently using it with great success.

For further information please visit

#### www.peak-networks.de





Notes

Distribución: ER-SOFT, S.A. Email: er@er-soft.com, Tel: +34 916 408 408



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http://www.eview.cn

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http://www.janbit.pl

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