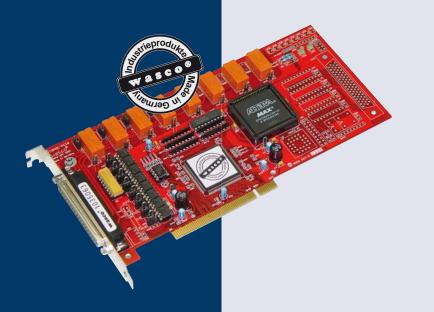


## **OPTOPRE-PCI8**standard

**Digital PCI I/O Interface Card with Eight Optocoupler Inputs** and Eight Relay Outputs



8 optocoupler inputs

8 relay outputs 2A

The **wasco**<sup>®</sup>-Interface board OPTOPRE-PCI8standard provides eight digital input lines and eight digital output lines, each of which are galvanically isolated. Inputs are electrically isolated by eight high power optocouplers with integrated Schmitt Trigger function, outputs by eight relays. Additionally the inputs are fitted with protection diodes against harmful voltage peaks.

You can adjust two different input voltage ranges by resistor arrays easily to change and plug in. Output relays manage a switching current of maximum 2 A.

The connections of the input optocouplers and the relay signals are led to a 37-pin Sub-D female connector, which is mounted to a slot bracket.

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## **SPECIFICATIONS**

Digital inputs optocoupler-isolated

Optocouplers: 8 \* PC900 8 channels, galvanically isolated Galvanic isolation also between every single channel with each two discrete connections for each of the channels Overvoltage protection by protection diodes

Two input voltage levels adjustable by accompanying resistor arrays:

R = 4,7 kOnm: R = 1,0 kOhm:	nign = 830 voit
	low = 04 Volt
	high = 2,215 Volt
	low = 0 1.5 Volt

IInput frequency:

#### Digital outputs by relays

8 channels, galvanically isolated Galvanic isolation also between every single channel with each two discrete connections for each of the channels Relay type: Tyco PE014012 Contact: 1 changeover contact Switching current: 2 A max. Switching voltage: max. 50 V AC/ 30 V DC Switching capacity: 100 VA / 60 W Isolation: Coil/Contact 500 V eff Mech. lifetime: max. 15 \* 106 switching cycles without load Contact lifetime: 2A, 50V AC, at changeover, max. 10<sup>5</sup> switching cycles Operation cycles under load: 6/min max. Operation cycles without load: 1200/min max. Circuit time: typ. 5 ms Dropout time: typ. 2 ms Bounce time NO contact: typ. 1 ms Bounce time NC contact: typ. 5 ms

Connectors

1 \* 37-pin Sub-D female connector

#### Bus system

32-bit PCI-Bus (internal data bus 16 Bit)

#### Power consumption

typ. 340mA +5V +12V typ. 140mA

#### **Dimensions**

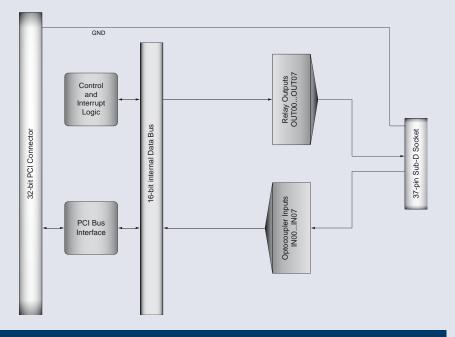
203 mm x 106,7 mm (l x h) 4layer Multilayer Board

#### Other

max. 10 KHz

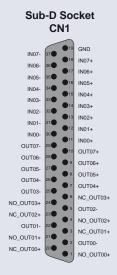
Protection and control LED for power supply of timer and I/O components as well as of logic control. All IC sockets with gold plated contacts

## **BLOCK DIAGRAM**



## **PIN ASSIGNMENT**

Anodes and cathodes as well as positive and negative connections of the output relays are led to the 37-pin Sub-D female socket CN1 for each line individually. The ground of the computer also is connected to this plug connector. CN1 is placed at the board's slot bracket, so optimal connections with strain relief to periphery is easily to obtain.



## CONNECTION TECHNIQUE (APPLICATION EXAMPLES)



\* D\$37R100D\$37 or D\$37R200D\$37 or D\$37R500D\$37

## PROGRAMMING

The accompanying CD provides drivers for Windows (please visit www.wasco.de to monitor available s/w versions) and sample programs for Turbo-C<sup>®</sup>, Delphi, Borland C++, C++ Builder, Microsoft Visual Basic, VB.NET, C++ and C#.NET

Scope of DELIVERY Interface Card OPTOPRE-PCI8stanDard German Manual (English on Demand) Driver and program examples on CD

#### **O**RDER INFORMATION

OPTOPRE-PCI8standard EDP No. A-423600 I/O Card

## **SUITABLE ACCESSORIES**

DS37R500DS37 EDP No. A-202800 Shielded connection line (approx. 5 m) to connect KMDB-37 to a 37pin Sub-D jack



DS37R200DS37 Shielded connection line (approx. 2 m) to connect KMDB-37 to a 37pin Sub-D jack

# EDP No. A-202400

## DS37R100DS37

Shielded connection line (approx. 1 m) to connect KMDB-37 to a 37pin Sub-D jack



#### KMDB-37

Terminal module with a 37pin screw terminal block with prototype area for soldering, to connect to a 37pin Sub-D jack

EDP No. A-2046

KMDB-37S



Terminal module with a 38-pin screw terminal block to connect to a 37pin Sub-D jack

#### For more detailed information about the here listed and other accessories we refer to the corresponding data sheets