

## General

The counter card type ZIB 1155/OPTO was designed to interface with PC`s internal BUS through any available expansion slot.
The board contains 4 independent 32 -bit-binarycounter, 16 digital inputs and 16 digital outputs. The main feature of this board is the input/output-to-system isolation, protecting the data acquisition system from damge caused by external high voltages.


## Counters

The counters are used for measurement of length by the usage of incremental encoder with two channel outputs or for event counting.
Several different modes are programmable. The available modes are listed below.

| counter | modes |
| :--- | :--- |
| up/down | 4-fold-mode |
| events | 2-fold-mode |
|  | 1-fold-mode |
|  | up-counter |

The BASE address is switch selectable and can be located anywhere up to 3 CO . This allows installing multiple boards in the same host at the same time.

## Isolated Up/Down-Counter-Board Model ZIB 1155/OPTO

## Highlights

-Input/Output-To-Sytem Isolation
-Programmable Functions
-4 Channel 32-Bit-Up/Down-Counter
-Event Counting

- Soft- Or Hardware-Reset
-Common Latch Input
-16 Digital Input Channels
-16 Digital Output Channels


## Digital I/O's

The digital inputs use plug-in resistance networks. By this way any desired input voltage level can be realized. The digital outputs are from open collector type. Currents up to 100 mA and voltages up to 30 V can be applied.

## Software

A disk is included with programming examples for Basic, Turbo Pascal, C, Visual Basic, 16 Bit DLL for Windows 3.X, and 32 Bit DLL for Windows 95.

| Technical Specifications |  |
| :--- | :--- |
| Counter | $: 4 \times 32$ Bit-Counter |
| Input Voltage Level | $: 5 \mathrm{~V}, 12 \mathrm{~V}, 24 \mathrm{~V}$ |
|  | or Customer Defined |
| Input Frequency | $:$ max. 300 kHz |
| Digital Inputs | $: 16$ Channels |
| Input Voltage Level | $: 5 \mathrm{~V}, 12 \mathrm{~V}, 24 \mathrm{~V}$ |
|  | Or Customer Defined |
| Digital Outputs | $: 16$ Channels |
| Current | $:$ max. 100 mA |
| Voltage | $:$ max. 30 V |
| Power Supply | $:+5 \mathrm{~V}$, max. $0,5 \mathrm{~A}$ |
| Connector | $:$ DB50-male |
| EMV | $:$ EMV-conformwith 89/336/EWG |
| Operating Temperaturer | $: 0-50{ }^{\circ} \mathrm{C}$ |
| Storage | $:-25$ to $+85{ }^{\circ} \mathrm{C}$ |
| Dimensions | $: 163 \times 100 \mathrm{~mm}$ |
|  |  |

## Ordering Information

ZIB1155-OPTO/X/XX/XX
Digital Input Level:
$05=5 \mathrm{~V}$
$12=12 \mathrm{~V}$
$24=24 \mathrm{~V}$
Counter Input Level:
$05=5 \mathrm{~V}$
$12=12 \mathrm{~V}$
$24=24 \mathrm{~V}$
Number Of Counters:
$1=1$ Counter
$2=2$ Counter
$3=3$ Counter
4 =4 Counter

