

Ideal for Desktop/Laptop use



USB-62-16



USB-62-32



### DESCRIPTION

The MicroDAQ USB-62 is a general purpose digital I/O product for the USB bus, featuring 16/32 Opto Isolated inputs and 24 TTL level Digital I/O lines. Based on the industry standard 82C55 PPI device, they communicate with the PC via the USB bus. The TTL Level Digital I/O can be programmed in banks of 8 as inputs or outputs.

The USB-62 with its Opto Isolated inputs eliminates the need for additional cables and Opto Isolation modules.

The USB-62 is powered by a Regulated 9VDC @ 1.2A Universal Input PSU, which is supplied with the unit.

### FEATURES

- USB Interface
- 24 TTL Level DIO Lines
- 16 or 32 Opto Isolated Digital Inputs (model dependent)
- I/O Connectors: 3x DB25 (USB-62-16); 5x DB25 (USB-62-32)
- LED Indication for power & USB connection.
- Ideal for Portable, Laptop & Lab applications
- Housing: Plastic ABS with Rubber feet
- Operating Temp: 0 to 70°C
- Power: 110mA (USB-62-16); 120mA (USB-62-32) max
- O/S Support for Windows 98/ME/2000/XP & Linux
- Includes EDRE SDK, EDRE-Labview, EDRE-Testpoint and Waveview for Windows.
- Dimensions (USB-62-16) 45(H) x 80(W) x 148(L) mm (USB-62-32) 65(H) x 80(W) x 148(L) mm

### Specifications

<b>Digital I/O(DIO)</b>	
No. of TTL Lines:	24
Logic Levels:	
Input Low Voltage:	-0.5V to 0.8V
Input High Voltage:	2.0V
Output High Voltage Min:	2.4V
Output Low Voltage Max:	0.45V
Maximum Output Current:	2mA
<b>Optically Isolated Input Characteristics</b>	
Optically Isolated Inputs:	16, 32(dependent on model number)
Frequency Response:	Up to 10 kHz (Computer and software dependent)
Logic Levels:	0V to 3V: Logic 0 3.1V to 24V: Logic 1
Isolation Voltage:	2500Vrms
Input Current:Continuous:	30mA
	Peak: 1A (Pulse 300ms, 2% Cycle)
Max forward current [LED]:	50mA

### Ordering Information

Supplied with EDR Enhanced Software, 1.8 Mtr. USB Cable & Universal Switch Mode 9V PSU

USB-62-16	USB 24 Channel DIO Unit with additional 16 Opto Isolated Digital Inputs
USB-62-32	USB 24 Channel DIO Unit with additional 32 Opto Isolated Digital Inputs



USB-62-16 Front



USB-62-16 Rear



USB-62-32 Front



USB-62-32 Rear

#### DIGITAL I/O (0-23)

PA1	14	1	PA0
PA3	15	2	PA2
PA5	16	3	PA4
PA7	17	4	PA6
PB1	18	5	PB0
PB3	19	6	PB2
PB5	20	7	PB4
PB7	21	8	PB6
PC1	22	9	PC0
PC3	23	10	PC2
PC5	24	11	PC4
PC7	25	12	PC6
	13		DGND

Front Lower DB25 Connector for 16 & 32 channel unit

#### OPTO-ISOLATED I/P (0-7)

I/P CHAN 0(-)	14	1	I/P CHAN 0(+)	
I/P CHAN 1(-)	15	2	I/P CHAN 1(+)	
I/P CHAN 2(-)	16	3	I/P CHAN 2(+)	
I/P CHAN 3(-)	17	4	I/P CHAN 3(+)	
I/P CHAN 4(-)	18	5	I/P CHAN 4(+)	
I/P CHAN 5(-)	19	6	I/P CHAN 5(+)	
I/P CHAN 6(-)	20	7	I/P CHAN 6(+)	
I/P CHAN 7(-)	21	8	I/P CHAN 7(+)	
*COM(-)	22	9	NC	
	NC	23	10	NC
	NC	24	11	NC
	NC	25	12	NC
		13		NC

Front Upper DB25 Connector for 16 channel unit & Front Centre DB25 Connector for 32 channel unit  
\*Internally set by factory if specified!

#### OPTO-ISOLATED I/P (8-15)

I/P CHAN 8 (-)	14	1	I/P CHAN 8 (+)	
I/P CHAN 9 (-)	15	2	I/P CHAN 9 (+)	
I/P CHAN 10(-)	16	3	I/P CHAN 10(+)	
I/P CHAN 11(-)	17	4	I/P CHAN 11(+)	
I/P CHAN 12(-)	18	5	I/P CHAN 12(+)	
I/P CHAN 13(-)	19	6	I/P CHAN 13(+)	
I/P CHAN 14(-)	20	7	I/P CHAN 14(+)	
I/P CHAN 15(-)	21	8	I/P CHAN 15(+)	
*COM(-)	22	9	NC	
	NC	23	10	NC
	NC	24	11	NC
	NC	25	12	NC
		13		NC

Rear Upper DB25 Connector for 16 channel unit & Rear Centre DB25 Connector for 32 channel unit  
\*Internally set by factory if specified!

#### OPTO-ISOLATED I/P (16-23)

I/P CHAN 16(-)	14	1	I/P CHAN 16(+)	
I/P CHAN 17(-)	15	2	I/P CHAN 17(+)	
I/P CHAN 18(-)	16	3	I/P CHAN 18(+)	
I/P CHAN 19(-)	17	4	I/P CHAN 19(+)	
I/P CHAN 20(-)	18	5	I/P CHAN 20(+)	
I/P CHAN 21(-)	19	6	I/P CHAN 21(+)	
I/P CHAN 22(-)	20	7	I/P CHAN 22(+)	
I/P CHAN 23(-)	21	8	I/P CHAN 23(+)	
*COM(-)	22	9	NC	
	NC	23	10	NC
	NC	24	11	NC
	NC	25	12	NC
		13		NC

Front Upper DB25 Connector for 32 channel unit  
\*Internally set by factory if specified!

#### OPTO-ISOLATED I/P (24-31)

I/P CHAN 24(-)	14	1	I/P CHAN 24(+)	
I/P CHAN 25(-)	15	2	I/P CHAN 25(+)	
I/P CHAN 26(-)	16	3	I/P CHAN 26(+)	
I/P CHAN 27(-)	17	4	I/P CHAN 27(+)	
I/P CHAN 28(-)	18	5	I/P CHAN 28(+)	
I/P CHAN 29(-)	19	6	I/P CHAN 29(+)	
I/P CHAN 30(-)	20	7	I/P CHAN 30(+)	
I/P CHAN 31(-)	21	8	I/P CHAN 31(+)	
*COM(-)	22	9	NC	
	NC	23	10	NC
	NC	24	11	NC
	NC	25	12	NC
		13		NC

Rear Upper DB25 Connector for 32 channel unit  
\*Internally set by factory if specified!