

Ideal for Desktop/Laptop/PDA use



## DESCRIPTION

The MicroDAQ SRL-69 is a Specialized digital I/O product which communicates to the host PC via a RS-232 or RS-485 (dependent on model) serial connection. Based on the industry standard 82C55 PPI device. It features 8/16 Reed Relay Outputs, 8/16 Opto Isolated Inputs (depending on model) and 24 TTL level Digital I/O lines. The I/O can be programmed in banks of 8 as inputs or outputs.

Two interface versions are available for the serial MicroDAQ range, these include RS-232 models and RS-485 models. The RS-232 models are best suited for short distances (up to 30 metres) or for use with hand held PC's such as PDA's.

The RS-485 models allow for long distance data transmission (up to 1200 metres). These RS-485 models are ideally suited for process control applications in a plant or industrial environment, which require long cable runs.

An easy-to-use configuration panel allows for easy setup of the devices. Drivers are provided for the most popular operating systems, as well as for the WindowsCE® family of products including PocketPC2002 and PocketPC2003. This support allows the serial MicroDAQ range to be controlled directly from a palm held PC with a serial port. Each unit is supplied with a WindowsCE API and control panel which is downloaded from a PC to the handheld device. Embedded Visual C++ and embedded Visual Basic examples are supplied.

The SRL-69 with its Reed Relay Outputs eliminates the need for additional cables and Relay modules. The SRL-69 is powered by a Regulated 9VDC @ 1A Universal Input PSU, which is supplied with the unit.

## FEATURES

- Connects via RS232 or RS485
- 24 TTL Level DIO lines
- 8 or 16 Reed Relay Digital Outputs (model dependent)
- 8 or 16 Opto Isolated Digital Inputs (model dependent)
- I/O Connectors: 3x DB25 (SRL-69-16); 5x DB25 (SRL-69-32)
- LED indication for power connection
- Ideal for portable/laptop applications
- Housing: Plastic ABS with rubber feet
- Operating Temp: 0 to 70°C
- Power: +/- 180mA (69-16), 250mA (69-32)
- O/S Support for Windows 98/ME/XP/2000 & WinCE (PocketPC2002 & PocketPC2003)
- Includes EDRE SDK, EDRE-Labview, EDRE-Testpoint and WaveView for Windows
- Dimensions (SRL-69-16) 45(H) x 80(W) x 148(L) mm (SRL-69-32) 65(H) x 80(W) x 148(L) mm

## Specifications

<b>Digital I/O(DIO)</b>	
No. of TTL Lines:	24
<b>Logic Levels:</b>	
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:	8, 16 (depending on model number)
Frequency Response:	Up to 10 kHz (Computer and software dependent)
<b>Logic Levels:</b>	
0V to 3V:	Logic 0
3.1V to 24V:	Logic 1
Isolation Voltage:	2500Vrms
Input Current:Continuous:	30mA
Peak:	1A (Pulse 300rms, 2% Cycle)
Max forward current [LED]:	50mA
<b>Reed Relay Characteristics</b>	
Number of channels:	8, 16 (depending on model number)
<b>Relay Contact Data</b>	
Contact Form:	Form A (SPST)
Rated Power:	20W (max)
Switching Voltage:	200VDC (max) (DC or peak AC)
Switching Current:	1A (max) (DC or peak AC)
Carry Current:	1.25A (max) (DC or peak AC)
Contact Resistance:	0.15 Ohm (Static); 0.2 Ohm (Dynamic)
Breakdown Voltage:	320 VDC (min) (Across Contacts)
	4200 VDC (min) (Contact to Coil)
Switching Time:	0.5mS
Release Time:	0.1mS

## Ordering Information

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

SRL-69-16-RS232	RS232 24 Channel DIO Unit with additional 8 Opto Isolated Digital Inputs & 8 Reed Relay Digital Outputs - incl 2Mtr RS232 Cable; Universal Switch Mode 9V PSU
SRL-69-16-RS485	RS485 24 Channel DIO Unit with additional 8 Opto Isolated Digital Inputs & 8 Reed Relay Digital Outputs - incl ADPT-9; Universal Switch Mode 9V PSU
SRL-69-32-RS232	RS232 24 Channel DIO Unit with additional 16 Opto Isolated Digital Inputs & 16 Reed Relay Digital Outputs - incl 2Mtr RS232 Cable; Universal Switch Mode 9V PSU
SRL-69-32-RS485	RS485 24 Channel DIO Unit with additional 16 Opto Isolated Digital Inputs & 16 Reed Relay Digital Outputs - incl ADPT-9; Universal Switch Mode 9V PSU

SRL-69-16 Front



SRL-69-32 Front



## 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

## REED RELAY O/P (0-7)

RELAY 0 (2)	14	1	RELAY 0 (1)
RELAY 1 (2)	15	2	RELAY 1 (1)
RELAY 2 (2)	16	3	RELAY 2 (1)
RELAY 3 (2)	17	4	RELAY 3 (1)
RELAY 4 (2)	18	5	RELAY 4 (1)
RELAY 5 (2)	19	6	RELAY 5 (1)
RELAY 6 (2)	20	7	RELAY 6 (1)
RELAY 7 (2)	21	8	RELAY 7 (1)
NC	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

## 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

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

## REED RELAY O / P (8-15)

RELAY 8 (2)	14	1	RELAY 8 (1)
RELAY 9 (2)	15	2	RELAY 9 (1)
RELAY 10 (2)	16	3	RELAY 10 (1)
RELAY 11 (2)	17	4	RELAY 11 (1)
RELAY 12 (2)	18	5	RELAY 12 (1)
RELAY 13 (2)	19	6	RELAY 13 (1)
RELAY 14 (2)	20	7	RELAY 14 (1)
RELAY 15 (2)	21	8	RELAY 15 (1)
NC	22	9	NC
NC	23	10	NC
NC	24	11	NC
NC	25	12	NC
		13	RELAY 8 (1)

Front Upper DB25 Connector for 32 channel unit

## 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 32 channel unit  
\*Internally set by factory if specified!