SRL-26/30

Serial 3 KHz 14 Bit A/D Unit with 4x D/A & 24DIO

Ideal for Desktop/Laptop/PDA use



DDAQ	



Specifications

Analog Inputs (A/D)	
Input Characteristics	
Input Channels:	16 / 32 Single Ended (Model Dependent)
Input Ranges:	±2.5V ±5V ±10V 0-5V 0-10V
Gain Scale:	1 / 10 / 100
Resolution:	14-bit
Input Coupling:	DC
Max Sampling Rate:	3kHz
Clock Source:	Internal 10MHz
	External – Convert (EXT_CLK)
Gate Source:	External – Convert (EXT_GATE)
Input Impedance:	1M Ohm
System Noise:	±1 LSB
Analog Outputs (D/A)	
Output Characteristics	
Output Channels:	None / 4 / 8 (Model Dependent)
Output Range:	±10V
Resolution:	14-bit
Full Scale Error:	±2 LSB
Settling Time:	1mS to 0.1% of full scale
Output Drive	±10V @ 5mA
Power-On State:	0V
Digital I/O (DIO)	
No. of TTL Lines:	24
Logic Levels:	
Input Low Voltage:	-0.5V to 0.8V
Input High Voltage:	2.0V to 5.0V
Output High Voltage Min:	2.4V
Output Low Voltage Max:	0.45V
Maximum Output Current:	2mA

D	B-	25	М	D	B-	25	(M)
PA1	14	1	PA0	ACH1	14	1	ACH0
PA3	15	2	PA2	ACH3	15	2	ACH2
PA5	16	3	PA4	ACH5	16	3	ACH4
PA7	17	4	PA6	ACH7	17	4	ACH6
PB1	18	5	PB0	ACH9	18	5	ACH8
PB3	19	6	PB2	ACH11	19	6	ACH10
PB5	20	7	PB4	ACH13	20	7	ACH12
PB7	21	8	PB6	ACH15	21	8	ACH14
PC1	22	9	PC0	DAC0	22	9	AGND
PC3	23	10	PC2	DAC2	23	10	DAC1
PC5	24	11	PC4	NC	24	11	DAC3
PC7	25	12	PC6	EXT_TRIG	25	12	NC
		13	DGND			13	EXT_CLK
		-				-	
D	igit	tal	I/O		Ar	alc	og

Ordering Information

SRL-26A16-RS232	RS232 16 (SE) or 8 (DIFF) Channel 3KHz 14-bit A/D, 24 DIO
	& 2 Mtr RS232 cable
SRL-26A16-RS485	RS485 16 (SE) or 8 (DIFF) Channel 3KHz 14-bit A/D, 24 DIO
	& ADPT-9
SRL-26A32-RS232	RS232 24 Channel DIO, 32 (SE) + 16 (DIFF) Channel 3KHz
	14-bit & 2 Mtr RS232 Cable
SRL-26A32-RS485	RS485 24 Channel DIO, 32 (SE) + 16 (DIFF) Channel 3KHz
	14-bit A/D & ADPT-9
SRL-30A16-RS232	RS232 16 (SE) or 8 (DIFF) Channel 3KHz 14-bit A/D, 4 x 14-bit
	DACS, 24 DIO & 2 Mtr RS232 cable
SRL-30A16-RS485	RS485 16 (SE) or 8 (DIFF) Channel 3KHz 14-bit A/D, 4 x 14-bit
	DACS, 24 DIO & ADPT-9
SRL-30A32-RS232	RS232 24 Channel DIO, 32 (SE) + 16 (DIFF) Channel 3KHz
	14-bit A/D & 2 Mtr RS232 Cable
SRL-30A32-RS485	RS485 24 Channel DIO, 32 (SE) + 16 (DIFF) Channel 3KHz
	14-bit A/D & ADPT-9
Also available with BNC	
SRL-26A16-RS232-BNC	Same as above - with isolated BNC's
SRL-26A16-RS485-BNC	Same as above - with isolated BNC's
SRL-30A16-RS232-BNC	Same as above - with isolated BNC's
SRL-30A16-RS485-BNC	Same as above - with isolated BNC's

DESCRIPTION

The MicroDAQ SRL-26/30 is a multi-function analog and digital I/O product which communicates to the host PC via a RS-232 or RS-485 serial interface. The unit has a 14-bit resolution and is the perfect measurement device for portable, laboratory or classroom use.

Featuring 16 analog inputs, the unit can be used to measure voltage signals from sensors, transducers, accelerometers and much more. It also features four analog outputs (SRL-30 model) which can be used as reference voltages and many other applications. The digital I/O is available in 3 sets of 8 channels which can be programmed 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.

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.

FEATURES

- Interface: RS232 or RS485 (Factory Set) •
- Resolution: 14-bit .
- 16/32 S/E or 8/16 Diff Analog Input Channels •
- **3KHz Sampling Speed** •
- Onboard 16K FIFO •
- 4x 14-bit Analog Outputs (SRL-30 only)
- 24x Digital I/O lines (3x 8-bit ports)
- I/O Connector: 2x DB25 Male (I for A/D & I for DIO)
- LED indication for power
- Ideal for Laptop/PDA use
- Housing: Plastic ABS with rubber feet •
- Operating Temp: 0° to 70°C
- O/S Support for Windows 98/ME/XP/2000 & WinCE (PocketPC2002 & PocketPC2003)
- Includes EDRE SDK, EDRE-Labview, EDRE-Testpoint and WaveView for Windows
- Power: Supplied with a IA 9VDC external Universal PSU
- Power Consumption: 500mA typ @ 9VDC
- Dimensions: 45(H) x 80(W) x 148(L) mm