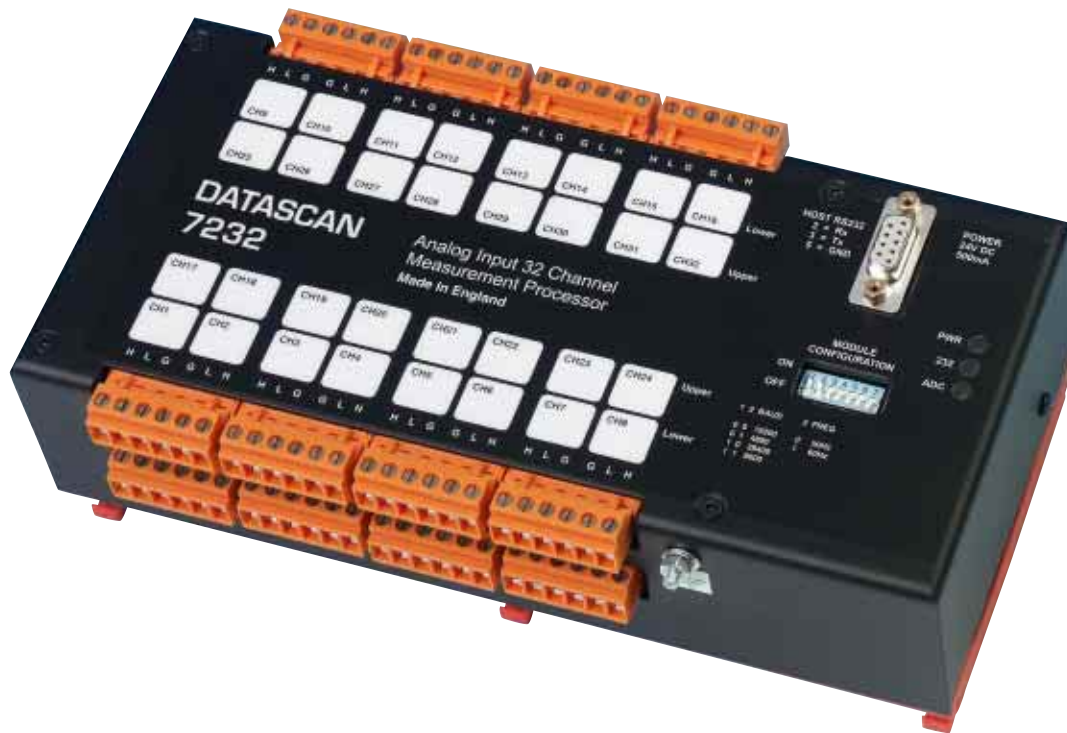


# DATASCAN TECHNOLOGY



- **Direct Sensor Connection for DC voltages, thermocouples, and 4-20mA converters**
- **32 analog inputs in one compact DIN rail mounted unit**
- **16 bit measurement performance with 0.625 $\mu$ V**
- **Serial Port isolated to 500V DC**
- **Local measurement speed up to 400 reading/sec.**
- **Multi-vendor software support**
- **Individual channel programming of sensor type and speed**
- **Compact Rugged DIN rail mounting**

The 7232 is a 32 channel analog input measurement processor. The unit provides direct sensor connection for thermocouples, DC voltages and 4-20mA inputs. Each channel can be individually programmed for specific sensors, speed and measurement range.

The high performance 16 bit ADC offers sensitivities as high as 0.625 microvolts. The integrating techniques of conversion provides high immunity to mains borne noise.

DIN rail mounting combined with plug-in screw terminal blocks make these modules easy to install and maintain. The channels can be mixed and matched under software control.

7232 ANALOGUE INPUT MODULE

The 7232 is designed for those applications that require a high packing density of channels in one unit. Using the pseudo digital input facilities of the product it is possible to mix and match both analog and digital inputs.

Each 7232 is supplied with a version of the Datascan configuration software DALITE. This will permit the user to configure the product and to log data as well as monitor measured values.

Datascan is supported by a wide range of standard software products.

Model type	No. of inputs	Applicable sensor types	Resolution	Input impedance
7232	32 (3 pole)	DC voltage, thermocouples, 4-20mA	16 bits @ 40 readings/sec 14 bits @ 400 readings/sec	30M ohms

Sensor	Range	Resolution 16 bit	Resolution 14 bit	Accuracy
DC voltage	10V	320 $\mu$ V	1.28mV	$\pm 0.02\%rdg \pm 0.01\%range + 1$ bit
	1.3V	40 $\mu$ V	160 $\mu$ V	$\pm 0.02\%rdg \pm 0.01\%range + 1$ bit
	150V	5 $\mu$ V	20 $\mu$ V	$\pm 0.02\%rdg \pm 0.01\%range + 1$ bit
	20V	0.625 $\mu$ V	2.5 $\mu$ V	16bit( $\pm 0.02\%rdg \pm 0.01\%range + 1$ bit+5 $\mu$ V
	Auto			14bit( $\pm 0.02\%rdg \pm 0.01\%range + 1$ bit+10 $\mu$ V

Calibration period 12 months. Calibration temp @20°C. All quoted errors are worst case Temperature coeff <30ppm / degC (CJC error 0.6 deg C).

Thermocouples	Ranges	Sensitivity	Sensitivity	Limits or Error
K type	-100 to 500°C	0.02°C	0.1°C	0.3°C
	500 to 1200°C	0.20°C	1.0°C	0.6°C
J type	-50 to 360°C	0.02°C	0.1°C	0.3°C
	360 to 800°C	0.20°C	1.0°C	0.5°C
N type	-200 to 100°C	0.10°C	0.4°C	0.6°C
	100 to 580°C	0.05°C	0.2°C	0.4°C
	580 to 1300°C	0.10°C	0.4°C	0.6°C
T type	-150 to 400°C	0.02°C	0.1°C	0.3°C
R type	0 to 1600°C	0.10°C	0.4°C	1.4°C
S type	0 to 1700°C	0.10°C	0.4°C	1.4°C
E type	-50 to 290°C	0.02°C	0.1°C	0.3°C
	290 to 1000°C	0.10°C	0.4°C	0.7°C
B type	200 to 1600°C	0.50°C	2.0°C	4.4°C

Other sensor types		
4-20mA	4-20mA	0.15%

Other specification details		
Common/series mode rejection:	DC common mode: 100dB's	AC Common mode: 120dB's AC Series mode: 60dB's

Power	Dimensions	Weight	Operating temp.	Humidity
Supply 24V DC Consumption <2watts@24V	W 230mm H 123mm D 80mm	1100 grams	Operating -10 to 60°C storage -20° to 80°C	RH 90% Non- condensing

RS232 Port	Overload protection
Baud rates: 4800, 9600, 19.2K, 38.4 Isolation: 500V DC	$\pm 30V$ continuous $\pm 200V$ transient <0.1s

# DATASCAN TECHNOLOGY

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