

Datascan Digital Input Output Modules 7031/35/36

General Description

The Datascan is a series of intelligent, distributed input/output modules designed for real time measurement, data collection and communication. The products are ideal for factory, industrial and scientific applications. The Datascan series includes intelligent Measurement Processors and various types of input/output modules for channel expansion, in all 26 modules for differing I/O requirements. The 7031/35/36 are a range of isolated digital input/output modules and can be used with either the 7010 or 7300 series of measurement processor.

Main Features

- Opto-Isolated to 240V AC RMS, 354V DC
- On board Volt Free Energisation for Contact Closures
- Low Frequency Counter Option (7031)
- AC input capability (50/60 Hz)
- LED status display of Inputs and Outputs
- Plug in Screw Terminal Blocks
- 240V AC RMS Overload protection
- Compact Rugged DIN rail mounted module

The **Datascan** series is designed to provide a simple, reliable, accurate and cost effective means of connecting plant sensors to standard computers for real time monitoring and data acquisition. The Datascan can be used universally with any type of computer as the data interface is by means of a standard serial port.

The **Datascan** series can be configured in local clusters of channels or alternatively as part of a total distributed network. Datascan can support up to 256 channels of local inputs or outputs using the units local expansion bus. Alternatively it can become part of a distributed network of up to 1000 channels spanning a distance of up to 4 Km (15000 ft).

Model Type	No of Inputs	Input Signal	Input Threshold	Overload Protection	Maximum Input Voltage
7031 Digital Input Module	16 isolated inputs	DC or 50/60Hz	1.0<Vt<4.0	240V AC RMS 354 VDC	24V DC
			Input Current		
			1-2mA @ 5V		

The 7031 is a 16 channel opto-isolated digital input module designed to be used with the Datascan 7000 and 7300 series. Packaged in a rugged DIN rail-mounted module, it connects directly to the Measurement Processor by means of the expansion bus connector. Inputs are individually isolated up to 240V AC RMS or 354V DC, channel to channel and channel to ground. Signals can be status monitored or counted to a maximum frequency of 10Hz. LEDs on the module indicate the status of each input. A current limited 5V DC power supply is provided for volt free contact energisation, eliminating the need for external supplies. The unit can accept both DC or AC input signals. Positive temperature coefficient thermistors are used to prevent damage under overload conditions of up to 240V AC RMS.

Model Type	No of Outputs	Maximum On Current	Maximum Off Voltage	Maximum On Resistance	Isolation
7035 Digital Output Module	16 isolated outputs	0.5 amps	32 volts	1 ohm	240V AC RMS 354V DC channel to channel
					240V AC RMS 354V DC channel to ground

The 7035 is a 16 channel isolated digital output module. Like the 7031 the unit is packaged in a DIN rail-mounted module, and can be connected to the Measurement Processor via the expansion bus. Outputs are individually isolated to 240V AC RMS or 354V DC, channel to channel and channel to ground. The use of open drain MOSFETS provides the capability of switching 0.5 amp loads with up to 32 volts. Protection on each output permits the direct drive of inductive loads. LEDs on the module indicate the status of each output.

Model Type	No of Inputs	Input Signal	Input Threshold	Overload Protection	Maximum input voltage
7036 Digital Input/Output Module	8	DC	1.0<Vt<4.0	240V AC RMS 354V DC	24V DC
	No of Outputs	Maximum On Current	Maximum Off voltage	Maximum On Resistance	Isolation
	8	0.5 amps	32 volts	1 ohm	240V AC RMS

The 7036 combines the features of both the 7031 and 7035 into a convenient multi-purpose module. Protected and isolated to 240V AC RMS the unit offers sensor energisation and counting to 10Hz.

Power	Dimension	Weight	Operating Temperature	Humidity
From 7010 or 7300	W 178mm H 128mm D 80mm	650 gms	-10 to + 60 °C Storage -20 to + 80 °C	RH 90% Non-condensing

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