

Xpert Digital I/O Module 8 Channels



Overview

The Xpert /XLite Digital I/O module has 8 digital input lines, six of which may be re-programmed as outputs. Two dedicated input lines can be programmed to normal sensitivity (sensing 0 to 5 volt digital signals) or high sensitivity (sensing low level signals such as those from an R.M. Young wind speed sensor).

Features

- ▶ 1 (one) switched battery power output (100 mA rating)
- ▶ 8 digital I/O total, 6 are bi-directional, 2 are input only. Configurable for use as follows:
 - ✓ Up to 8 general purpose sampled inputs, level sense with alarm or 32 bit event or frequency counters
 - ✓ Up to 4 quadrature output sensors (quadrature requires 2 inputs per sensor)
 - ✓ Built-in 100K pull-up on 6 inputs accommodates switch closure sensors such as a tipping bucket.
 - ✓ 2 switchable threshold RM Young wind-sensor-compatible inputs (low level AC signal).
 - ✓ 6 inputs accept switch battery voltage signals as well as 5V logic signals.
 - ✓ 6 open collector type outputs that can work with devices tied to 12V. Includes 100 ohm current limiter. (70 mA max current)
- ▶ Maximum input frequency: 1 kHz
- ▶ Minimum pulse width for inputs: 500 uS
- ▶ Industrial temperature range operation -40 to +6°C



ORDERING & SHIPPING

8080-0002-1	Xpert Digital I/O Module, 8 Channels
Shipping Height	8 in. (20.4 cm)
Shipping Length	8 in. (20.4 cm)
Shipping Width	3 in. (7.7 cm)
Shipping Weight	4 lbs. (1.8 Kg)

Digital I/O Module, 8 Channels

1	G
2	1*
3	G
4	2
5	G
6	3
7	G
8	4
9	G
10	5
11	G
12	6
13	G
14	7#
15	G
16	8*#
17	G
18	SW BAT

G = Ground
* = Input Only
= Switchable Sensitivity

DIGITAL I/O MODULE SPECIFICATIONS

Subject to change without notice

Parameter	Min	Typ	Max	Units
Inputs				
Sampling Interval		500		Microseconds
Switchable Threshold	0.02		2.5 ¹	Volts
Output (open Drain MOS Switches)				
Pull-up Voltage	0		14	Volts
Resistance	80		125	W
Current			70	mA
SW BAT Output				
Current			100	mA
Protection				
Static Discharge ²			2000	Volts
Lightning Conducted ³			400	Volts
Device Dimensions	5" x 4.5" x 1.3"			
Weight	.5 lbs.			

¹ CMOS Levels

² Human Body Model

³ 1 Microsecond Rise, 1 Millisecond Fall