## **Xpert Digital I/O Module** w/Termination



## Overview

The Xpert/XLite Digital I/O Module with Termination has multi-stage circuitry & auto reset after surge. It also provides surge protection and transient protection for sensors. The Module has 8 digital input lines, 6 of which may be re-programmed as outputs. The 2 dedicated input lines can be programmed for normal sensitivity for sensing 0 to 5 volt digital signals, or high sensitivity for 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 +60 C
- Module adds a termination board that provides automatically resetting multi-stage protection circuitry capable of handling up to 20 kA (8/20 uS)



SPECIFICATIONS	
Parameter	
Multi-stage circuitry	Automatically resets after surge
Operating temperature	-40°C to +60°C
Accepts wire sizes (*input side)	26-14 AWG
Accepts connection (#output side)	0.1" centerline ribbon cable
Series resistance (Analog I/O)	10 ohms
Power handling	(8/20 uS) 20 kAmps
Clamping voltage	36 V
Maximum line voltage (Analog I/O)	22 V
Device Dimensions	5" x 4.5" x 1.3"
Weight	.5 lbs.
ORDERING & SHIPPING	
Part #	
8080-0002-4	Xpert Digital I/O Module with Termination Board
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)