4.4.9. Digital Input Pulse Accumulation

Function

The Digital Input Pulse Accumulation accepts 24VDC signals as discrete inputs. The first 16 channels can be configured either as Digital Input or Pulse accumulation to support Pulse Accumulation and frequency measurement on per channel basis.

Notable Features

- Extensive internal diagnostics for data integrity
- Optional redundancy
- Internal / External field power selection
- Galvanic isolation
- Support Pulse Accumulation & frequency measurement
- Support mix of per channel Pulse accumulation and DI

Detailed Specification – Digital Input Pulse Accumulation (8C-PDIPA1)

Parameter	Specification		
Input / Output Module	8C-PDIPA1 - 24VDC Digital Input Pulse Accumulation, Coated		
IOTA Modules	8C-TDILA1	Non Redundant, Coated	9”
	8C-TDILB1	Redundant, Coated	12”
Input Channels [1]	32		
Galvanic Isolation (any input terminal voltage referenced to common) [2]	1000 VAC RMS		
Isolation Technique	Optical (In IOM)		
Voltage Rating	24 VDC		
DI Power Voltage Range	18 to 30 VDC (For user supplied field power)		
Module current rating	105 mA		
Signal Type (Pulse Accumulation)	Accumulation Type (0-1KHz, for minimum 30% DUTY CYCLE devices)		
Minimum Pulse Width	300 uSec		
Individual Channel SCAN Time	300 uSec		
ON Sense Voltage/Current	13 VDC (min) or 3 mA (min)		
OFF Sense Voltage/Current	5 VDC (max) or 1.2 mA (max)		
Input Impedance	4.2 KΩ		
Absolute Delay Across Input Filter and Isolation	5 ms ± 20%		
Module Removal and Insertion Under Power	Supported		
Note 1 – Channels 1-16 can support Pulse accumulation on per channel basis and Channels 17-32 can be configured as DI Note 2 – System to Field type isolation, option available only with external user supplied power			