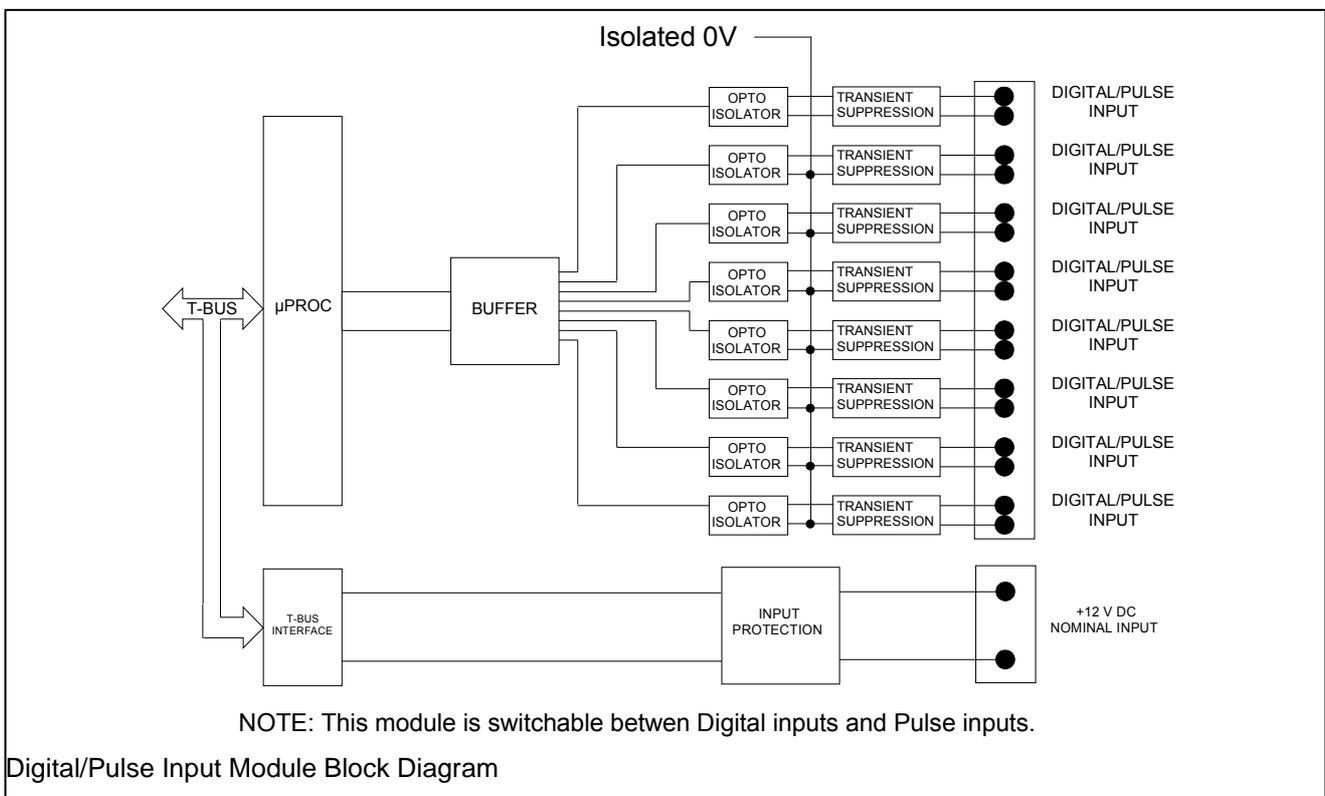




# VersaNet2 Radio Data Network Digital/Pulse Input Module Part No.IRDN302

## Features

- Collects 8 volt-free or open-collector inputs as steady-state or pulses
- Maximum of sixteen modules can be used per VersaNet2 node
- 8 input channels each programmable for Digital or Pulse collection
- Secure transmission with ARQ prevents Pulse counting errors



## Brief Description

The digital/pulse input module is used to collect eight channels of either steady state digital contacts or pulse counting inputs into a VersaNet2 node. Each input channel may be configured to accept digital or pulse counting signals. A maximum of sixteen modules may be used in the same node giving a total of 128 inputs which are user configured. Each input channel consists of an opto-isolated DC supply for connection to the users volt free contacts or open collector transistor outputs. Transient suppression is provided on every input to protect against spikes and surges. The DC supply on these terminals is isolated from the VersaNet power supplies, but is common to all input channels.

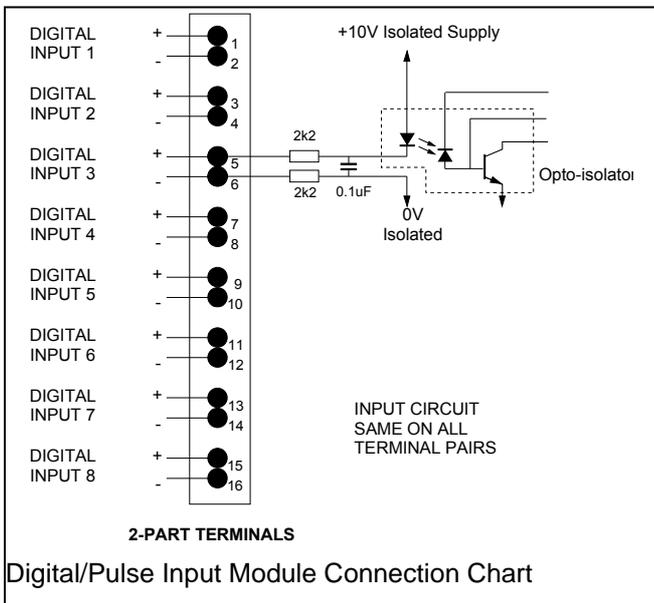
When used for pulse counting, only pulses wider than 5mS will be detected which eliminates switch bounce. Each input channel counter can store a maximum count of 65535. To avoid overflow an appropriate transmission interval must be selected.

## Low Power Option

The IRDN302 can be used as a low power digital input card by selecting the option with link 2 on the PCB. (Note that it cannot be used for pulse input in low power mode). In conjunction with a Communications Controller, a low power node can be configured for use in locations without mains power supplies. See the VersaNet2 Manual for full details of low power operation.

## Technical Specification

Part Number	IRDN302
No. of modules per Node	16 max
Processor	80C31
Internal Interface	T2-BUS Slave Peripheral
Input Channels	8 (programmable for Digital or Pulse)
Input terminal voltage	10V DC
Input Pulse Width	5 mS minimum
Input Pulse Frequency	100Hz maximum
Maximum Pulse Count	65535
Scan Rate (Digital i/ps)	1 second
Power Supply	11-14V DC through T2-BUS
Current Consumption	Minimum           30 mA
	Typical             50 mA
	Maximum          70 mA
	300µA in low power mode
Operating Temperature	-10°C to +55°C
User connection	2 part screw terminals
Dimensions	144 x 167x 22mm
Weight	0.2kg



For exact configuration instructions please refer to the VersaNet2 User Manual (LIT0002) a copy of which is supplied with your VersaNet2 system.

### DIP Switch Settings

Switch 1 (4-way DIP switch) should be set to a unique address for each module of this type within a node. DIP switch setting should be performed without power connected. Switch positions are shown below.

SW1 Setting				Address
1	2	3	4	
on	on	on	on	1
off	on	on	on	2
on	off	on	on	3
off	off	on	on	4
on	on	off	on	5
off	on	off	on	6
on	off	off	on	7
off	off	off	on	8
on	on	on	off	9
off	on	on	off	10
on	off	on	off	11
off	off	on	off	12
on	on	off	off	13
off	on	off	off	14
on	off	off	off	15
off	off	off	off	16

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