

VersaNet2 Radio Data Network

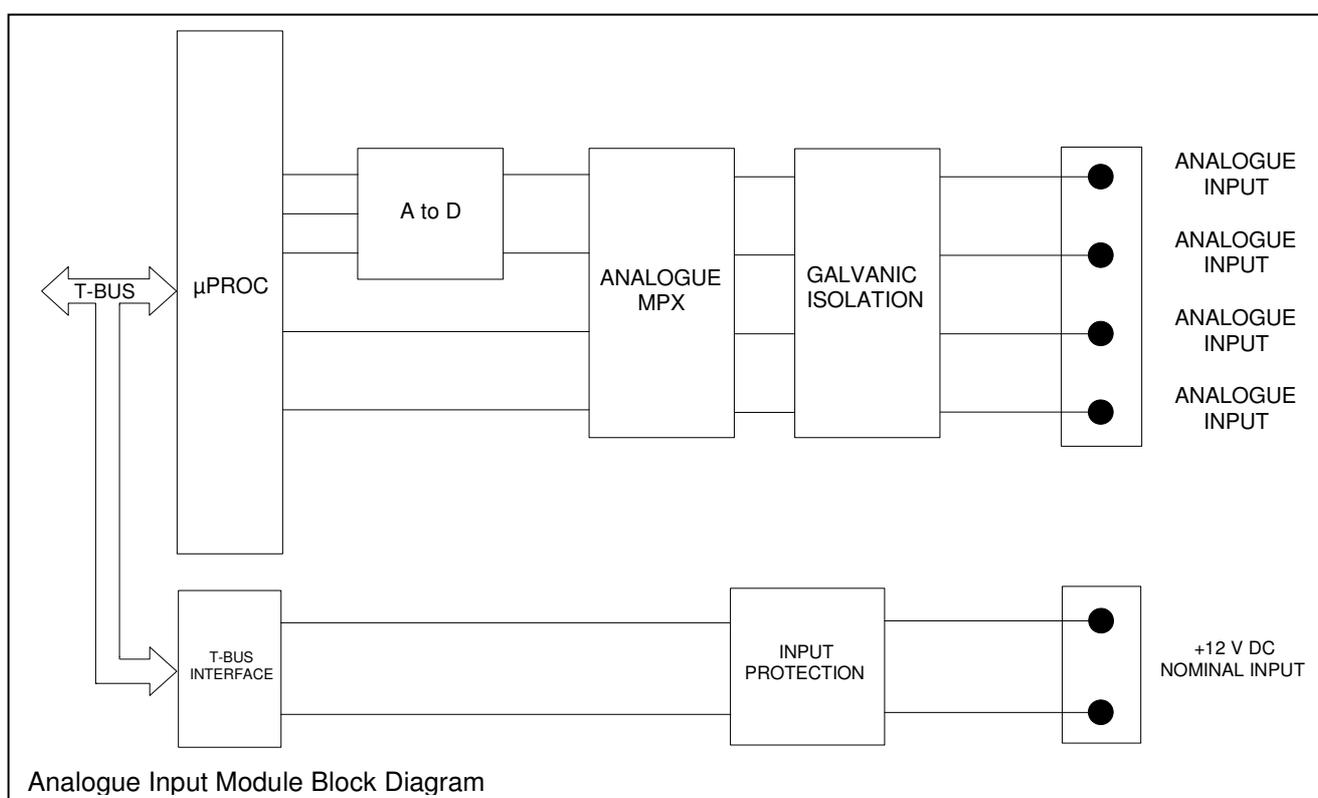
Analogue Input Module

Part No. IRDN307J

Publication IRDN307J/Jan2014

Features

- Up to four analogue inputs available per module
- 1Kv galvanic isolation
- 12 bit resolution
- Data input can be in the form of 0-5V or 0-20mA DC current
- Up to sixteen modules can be used in each VersaNet node



Brief Description

The analogue input module is used to collect up to four analogue readings into a node. Each input has galvanic isolation offering 1000V isolation between input channels and earth. There is also additional transient suppression on each channel to protect against spikes and surges. The data may be in the form of DC voltage in the range of 0-5 V or a DC current of 0-20mA. This is switchable for each input channel individually.

Analogue input values can be programmed to

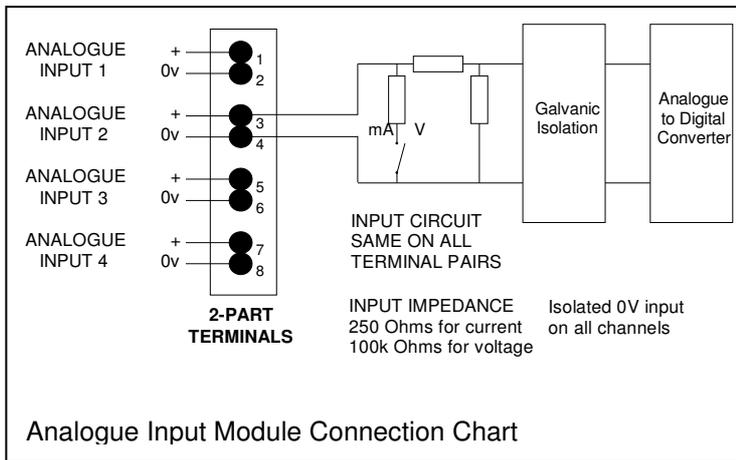
transmit on a time interval, % change, or combination of both, using the configuration port on the Communications Controller of the node.

Low Power Option

The IRDN307 can be used as a low power analogue input card by selecting the option with link 6 on the PCB. 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

<p>Module Name Part Number No. of modules per Node Processor Internal Interface Analogue Inputs</p> <p>Precision Scan Rate Power Supply Current Consumption</p> <p>Operating Temperature User connection Dimensions Weight</p>	<p>Analogue Input IRDN307 16 max 80C32 T2-BUS Slave Peripheral 4 0-5V DC or 0-20mA DC (selectable) with 1000 V isolation to earth 12 bit 1 second for 4 channels 11-14V DC through T2-BUS Minimum 10 mA Typical 50 mA Maximum 100 mA 300µA in low power mode -10°C to +55°C 2 part screw terminals 144 x 167x 22mm 0.2kg</p>
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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

Rack Mounting

A rack mount version of the IRDN307 is available – Part code IRDN307R. This card is fitted with a DIN 41612 connector to allow direct fitting into a 4U rack and connection to a back plane.

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