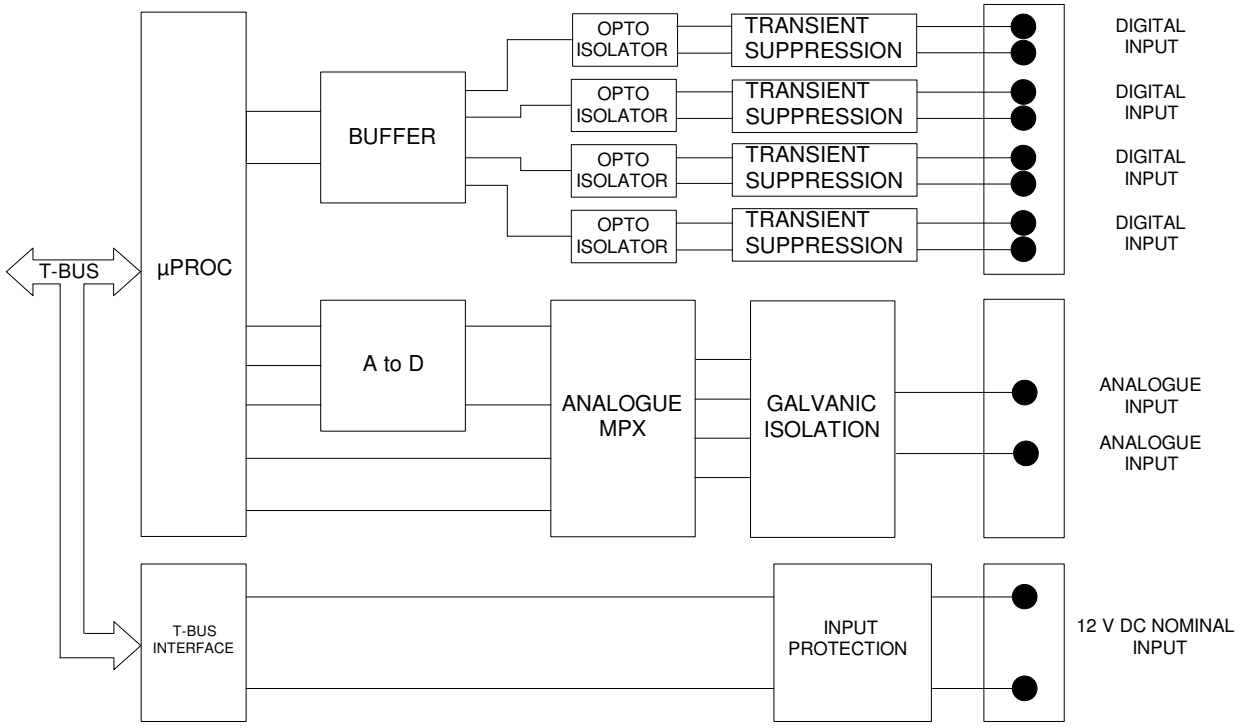
Judd Telemetry
TELEMETRY IN CONTROL

VersaNet2 Radio Data Network
Combination Input Module
Part No.IRDN311

Publication IRDN311/1/Apr2013

Features

- Collects up to four digital and two analogue inputs for the VersaNet node
- Data can be in the form of 0-5V DC or 0-20mA(selectable per channel)
- Suitable for use at locations without mains power supply
- Only one Combination Input Module can be used per VersaNet node



Combination Input Module Block Diagram

Brief Description

The Combination Input Module is used to collect up to four digital inputs and two analogue readings into a node.
Each digital input channel consists of an opto-isolated DC supply for connection to the users volt free contacts or open collector transistor outputs. The DC supply on these terminals is isolated from the VersaNet power supplies, but is common to all input channels. Transient suppression is provided on every input to protect against spikes and surges.
Each analogue input has galvanic isolation offering 1,000V isolation between input channels and earth. The data may be in the form of DC voltage in the range of 0-5V or a DC current of 0-20mA. This is selectable for each input channel.

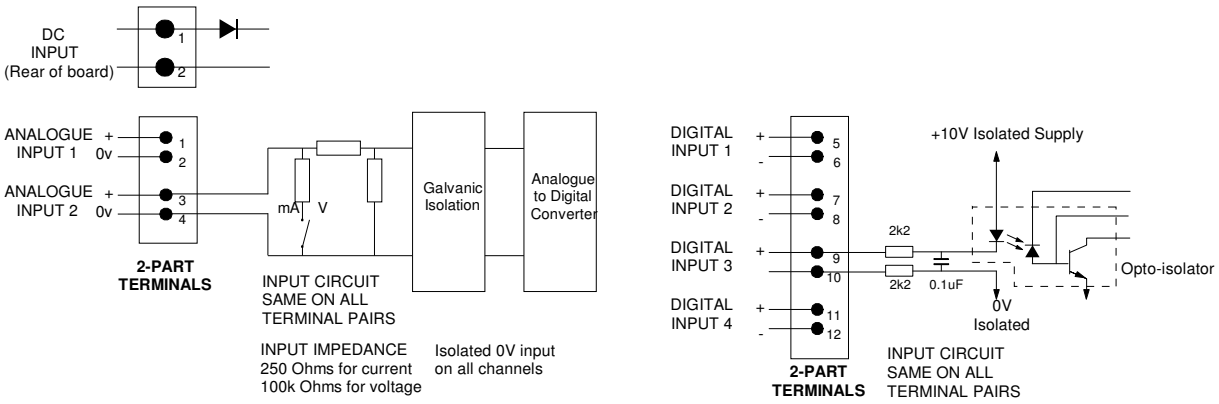
Analogue input values can be programmed to transmit on a time interval, % change, or combination of both using the configuration port on the Communications Controller of the node. Digital inputs can be programmed to transmit on time interval or change of state.

Low Power Option

The IRDN311 can be used as a low power combination 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

Module Name	Combination Input Module
Part Number	IRDN311
No. of modules per Node	1 maximum
Processor	80C31
Internal Interface	T2-BUS Slave Peripheral
Digital Inputs	4 volt free
Analogue Outputs	4 Channels 0-5V DC 0-20mA DC switchable
Precision	12 bit
Scan Rate	1 second for all channels
Power Supply	11-14V DC direct or 11-14V DC from DC adaptor via T2-BUS
Current Consumption	Minimum 30mA Typical 50mA Maximum 100mA Low Power Mode 300µA
Operating Temperature	-10°C to +55°C
User Connection	2 part screw terminals
Dimensions	144 x 167 x 32mm
Weight	0.3kg



Combination Input Module Connection Chart

Judd Ltd

Lower Voakes, West Chiltington, Pulborough, Sussex RH20 2LU UK

Telephone: +44 (0) 1798 815046

Email: Juddtelemetry@gmail.com URL: www.radio-data.co.uk