

## Model: rdcARMC

### Dual 0-20 mA Receiver to Modbus Converter

The rdcARMC converts a standard 4 to 20 mA (or 0 to 20 mA) signal into its digital equivalent and allows it to be retrieved from a standard Modbus interface via RS-485.

To compensate for drifts or offsets in the analogue loops, the rdcARMC allows on-the-fly digital adjustments.

The RS-485 port provides 2.5 KV of galvanic isolation from dangerous surges from the analogue loops. Furthermore, all ports are fitted with 600 W transient suppressors for further protection.

All serial and Modbus parameters can be configured via an "easy-to-use" configuration program.

Visit us at [www.robustdc.com](http://www.robustdc.com) for more information.

## Specification Interface

- Serial : RS-485 (2-wire mode)
- Analogue : 0 - 20 mA Receiver
- Connectors : 3-way Screw Terminal for RS-485 and Power terminal
- 2-way Screw Terminal for Analogue Inputs

### Power Supply

- 9 to 36 VDC : 1.2 W Nominal (50 mA @ 24 Vdc)
- User Indications : Green LED for main power supply

### Isolation

2.5 KV between supply and RS-485 port.

### RS-485 Communication

- Serial Protocol : Modbus RTU
- Serial Speeds : 9600, 19200, 38400 bps
- User Indications : Yellow LEDs indicate TX and RX for RS-485 port
- Red LED to indicate Modbus comm errors

Max RS-485 Distance : 2 Km

### Analogue Inputs

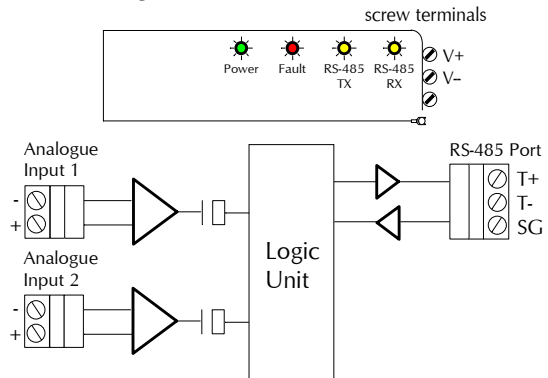
- Analogue Input Z : 50 ohms (Built into each analogue port)
- Sampling Rate : 15 samples per second
- Resolution : 12 bits (0 to 4095)
- Accuracy : +/- 0.05 mA

### Mechanical / Environment

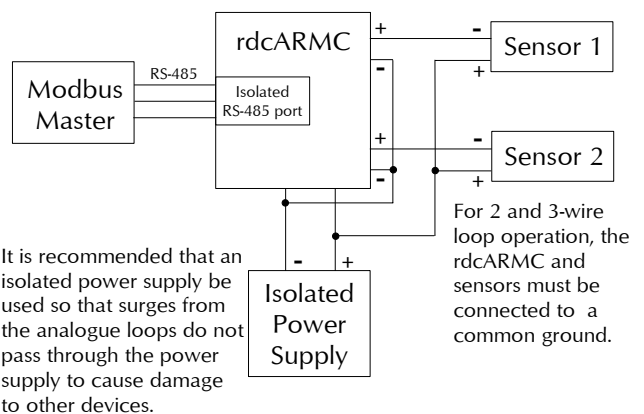
- Operating Range : -40C to +65C
- Storage Range : -40C to +100C
- Relative Humidity : 10 to 90% RH, non-condensing
- Case Material : nylon polyimide, fungus and termite resistant self-extinguishing
- Weight : approx 140g
- Mounting Rail : DIN EN 50 022 or DIN EN 50 035

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(Version 1.1) Specifications subject to change without notice.

### Block Diagram



### Application - Dual 2-wire Loop Operation



### Order Information

- rdcARMC---
- C** Connectors: C-terms for RS-485 and Analogue Input Ports
  - 2p** Galvanic Isolation Configuration: Isolated RS-485 port. Analogue gnd = DC supply gnd
  - dv** Power Supply Configuration: 9 to 36 vDC Supply

Boxes in bold denote factory default options

### Dimensions in mm (and inches)

