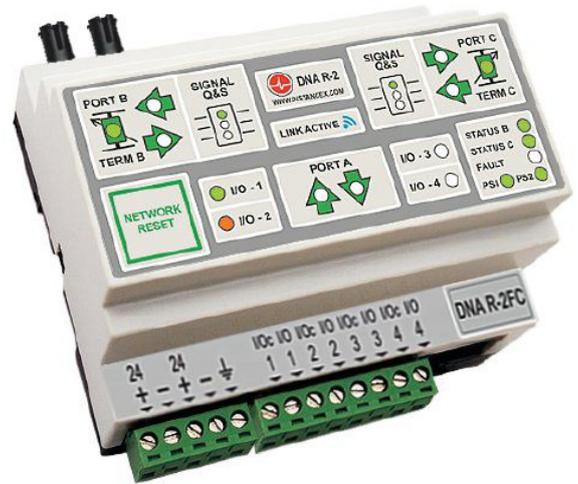


DNA R-2FC

Fiber Optic / RS485 Redundancy Node

For an independent EN54-13 Life safety Communication Network layer



Overview

The DNA R-2FC, Fiber Optic / RS485 Redundancy Node for Ring Topology Networks, has been developed by INSTANCE to facilitate dynamic network management through the provision of an independent (mixed medium) communication layer.

The equipment is designed to improve the Quality of Service (QoS) of critical communication networks while operating under the performance criteria required by EN54-13 and BS5839 part 1.

The DNA R-2FC module has a single fiber optic port and single RS485 port allowing for a mixed fiber optic / RS485 Class A redundant ring topologies. The fiber optic and RS485 ports connected to the communications ring are continuously monitored to ensure optimum signal quality. This continuous signal monitoring allows the system to adjust the communication paths in the event of physical cable parameter changes.

Four Input/Output interfaces are provided for through an independent communications layer.

This feature provides a basic redundant network protocol with the mapping configuration managed through the PC graphics I-View programming tool.

Features

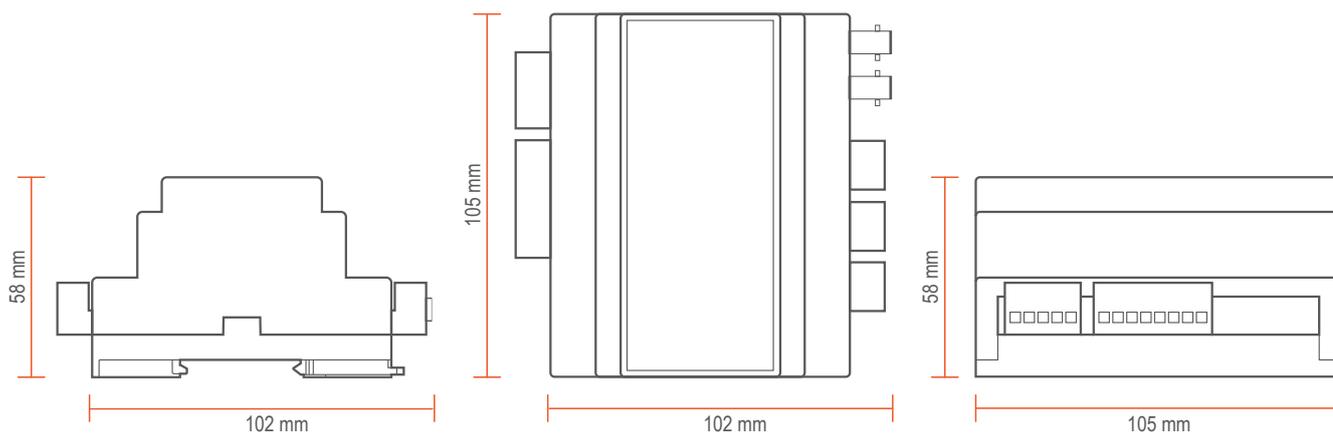
- Independent Reporting with Class A communication redundancy
- Multiple fault tolerance
- 2.5 kV isolation on all ports
- Dual and single Industrial Equipment RS485 connection
- 4 independent I/O channels across the redundant network ring for independent protocol redundancy
- Can operate on Hosted Fiber /Ethernet links
- Simple LED System Status indication
- Signal quality and amplitude visual indication
- Wireless Connectivity for remote monitoring using a Blue tooth or WiFi communication connection
- Supports the generation of system performance reports for Installation commissioning
- Visual interface provided by IView, the INSTANCE Graphical User Interface with Monitoring, Diagnostics and Reporting options
- Enables preventative maintenance management through system degradation monitoring
- Configuration and commissioning parameters are stored allowing for system performance tracking over time
- Baud rate selectable from 9600-115kbits/sec



Specifications

Dimension Diagram

Dimensions: 105 X 58 X 102 mm
 Weight: 0.2kg
 Din Rail Mount: EN60715 (width 35 mm)



Power

Operating voltage: 18 to 36V (24V DC nominal)
 Rated current: 350mA (at 24V)

Interfaces

RS485: Port A1: Fixed Termination, in accordance with EIA RS-485
 Port A2: Fixed Termination, in accordance with EIA RS-485
 Port B: Dynamic Termination, in accordance with EIA RS-485
 Fiber Optic: Port C: Fiber Optic, ST connector (SC on request), 1300nm, 62.5/125 μ m and 50/125 μ m fiber cables
 USB: USB Micro-B connection (Device / Slave Mode)
 Isolation: Port A1, A2, B and I/O bank: Isolated (2.5kV)

Temperature

Operating: -10 to 50°C
 Storage: -40 to 70°C

Agency Approvals and Standards

CE, RoHs, WEEE compliant
 EMC EN 61000-6-2, Immunity Standard (Industrial Environments)
 EN 61000-6-4, Emission Standard (Industrial Environments)
 Safety EN 60950, IT Equipment

