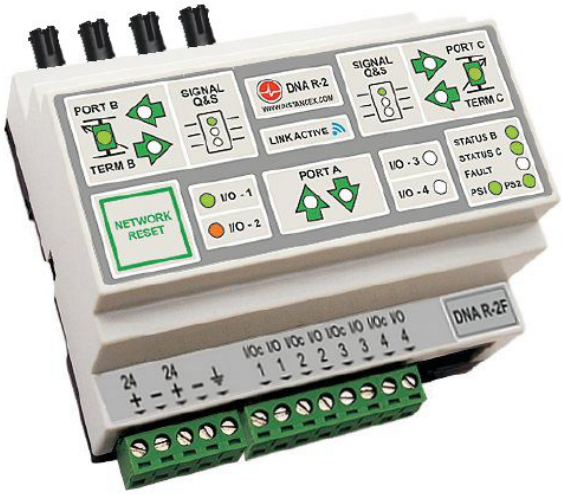
DNA R-2F

Fiber Optic Redundancy Node

For an independent EN54-13 Life safety Communication Network layer



Overview

The DNA R-2F, Fiber Optic Redundancy Node for Ring Topology Networks, has been developed by INSTANCE to facilitate dynamic network management through the provision of an independent 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-2F is a two port fiber optic node module allowing for fiber optic Class A redundant ring topologies. The fiber optic ports connected to the communications ring are continuously monitored to ensure optimum signal quality. This continuous signal monitoring allows for 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

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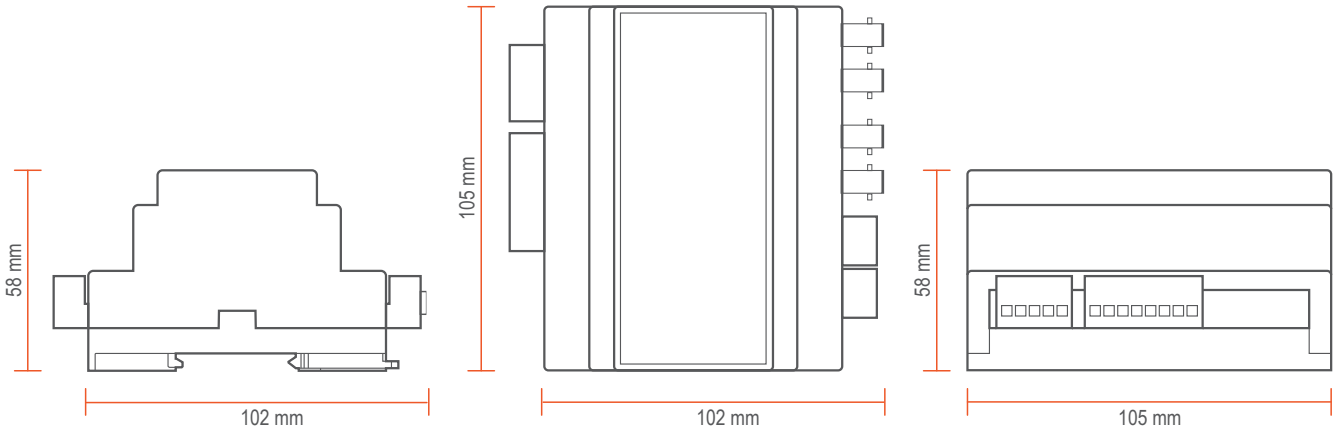
Specifications

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
Fiber Optic:	Port B: Fiber Optic, ST connector (SC on request), 1300nm, 62.5/125 µm and 50/125 µm fiber cables Port C: Fiber Optic, ST connector (SC on request), 1300nm, 62.5/125 µm and 50/125 µm fiber cables
USB:	USB Micro-B connection (Device / Slave Mode)
Isolation:	Port A1, A2 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

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