

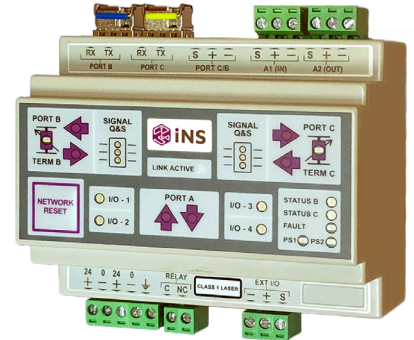
# DNX-R-2F/FC-K

iNS RS485/Fibre & Dual Fibre Dynamic Network Analyser



## Features

- ▶ Independent reporting with Class A communication redundancy, with multiple fault tolerance
- ▶ 2.5 kV galvanic isolation on all ports
- ▶ Support of single and dual port industrial equipment
- ▶ RS485 connections
- ▶ Support for iNS Small Form Factor Pluggable (SFP) transceivers
- ▶ Simple LED status indication for fibre and RS485
- ▶ Unique Digital Optical Monitoring (DOM) support
- ▶ Wireless connectivity for remote monitoring using a Bluetooth or WiFi interface
- ▶ Support for the generation of system performance reports required for installation commissioning
- ▶ Visual interface provide by IVIEW the 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
- ▶ Ports B or C with RS485 transceivers have adjustable termination to correctly match the loop cabling segment
- ▶ Baud rate selectable from 9600 - 115200 bits/sec
- ▶ DIN rail mounting



## Description

DNX-R-2F/FC-K has been developed to provide dynamic network management for both radial and ring network topologies. 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.

DNX-R-2F/FC-K can operate in passive or active mode selectable by a switch on the module. In passive mode the module becomes a plug 'n play RS485 fibre optic converter. Active mode supports intelligent monitoring of network performance and diagnostic information. An additional license (DNX-R-2F/FC-K-UG) can be purchased which unlocks further diagnostic capability and monitoring.

To support fibre optic connections DNX-R-2F/FC-K must be fitted with suitable transceivers. Hybrid RS485/Fibre networks only require a single transceiver per module. Full fibre network support will require one or two transceivers per module dependent on the fibre mode.

DNX-R-2F/FC-K provides unique Digital Optical Monitoring (DOM) of the fibre transceivers this allows the monitoring and diagnostics of key data:

- ▶ Optical Fibre TX & RX Power (dBm)
- ▶ Bias Current of laser (mA)
- ▶ Temperature (°C)
- ▶ Supply Voltage (Volts)
- ▶ Transceiver operating limit warnings
- ▶ Transceiver operating limit alarms

DOM information from the fibre optic transceivers can be viewed and monitored using the IVIEW software management tool. This allows the generation of system performance reports along with notifications of degradation in network performance enabling preventative maintenance reducing system downtime.

### iNS Products

DNX-R-2F/FC-K	iNS RS485/Fibre & Dual Dynamic Network Analyser
DNX-R-2F/FC-K-UG	iNS upgrade license for network support analysis (DNX-R-2F/FC-K)

### iNS SFP fibre optic transceivers

INST-SFP-MM-01-K	iNS SFP Multi-mode fibre optic transceiver [550m]
INST-SFP-SS-20K-1	iNS SFP Single mode fibre optic transceiver [20Km]

### iNS SFP Bi-Directional single fibre optic transceivers (one of each required)

INST-SFP-BiDi-10K-AB-1	iNS [10km Range] Single Fibre - 1550nm Tx/1310nm Rx Optic Fibre SFP Transceiver to populate DNX R-2F/FC-K
INST-SFP-BiDi-10K-BA-1	iNS [10km Range] Single Fibre - 1310nm Tx/1550nm Rx Optic Fibre SFP Transceiver to populate DNX R-2F/FC-K

### iNS Accessories

IVIEW-S-U01	iNS I-View maintenance & diagnostic software - Single PC Site Restricted Perpetual Licence (for connecting to a single local network)
IVIEW-E-U01	iNS I-View maintenance & diagnostic software - Single PC Annual Engineering Licence (engineering laptop for use on multiple networks)

## Specification

Operating Voltage	18 to 36V (24V DC nominal)
Rated Current	250mA (at 24V)
RS485	Port A1: Selectable Fixed Termination, in accordance with EIA RS485 Port A2: Selectable Fixed Termination, in accordance with EIA RS485
Fibre Optic/RS485	Port B: Fiber Optic, SFP Connector (Specification as per selected SFP transceiver) [RS485/Fibre] Port C: Fibre Optic, SFP Connector (Specification as per selected SFP transceiver) [Dual Fibre] Port C: Dynamic Termination Port A1, A2 (& Port C -FC model): Isolated (2.5kV) Baud Rate: 9600 to 115200 (selectable / configurable)
USB	USB Micro-B connection (Device / Slave Mode)
Module	Proprietary Interface Card connection (Bluetooth / WiFi / GPRS)
Operating Temperature	-10 to 50°C
Storage Temperature	-40 to 70°C
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
Dimensions	115 X 105 X 58 mm
Weight	200g
Mounting	DIN Rail EN60715 (width 35 mm)

## Dimensions (mm) (Not to Scale)

