

Schneider Series Service Manual

140NRP95401C

1. Description

Manufacturer : Schneider Electric

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type Fibre Optic Repeater
Product	Line Modicon Quantum
Part	Number 140NRP95401C
Power	Dissipation 5 Watts
Required	Bus Current 750 milliamperes
Local	Signalling 4 green LED indicators and 3 red LED indicators
Inrush	Current 1.8 Amperes at 5 Volts DC
Number	of Ports Two ports for fiber optic connectors and one port for coaxial connector
Operating	Altitude Up to 2,000 meters (6,561.68 feet) above sea level
Ambient	Operating Temperature 0 to 60°C (in a non-condensing environment)
Rise/Fall	Time 20 nanoseconds
Storage	Temperature -40 to 85°C (in a non-condensing environment)
Fibre	Optic Type Single mode
Receiver	Sensitivity -25 decibel-milliwatts
Detected	Silence -45 decibel-milliwatts
Humidity	Tolerance 0 to 95% relative humidity (without condensation)

3. Product Information

Manufacturer : Schneider Electric

Product No. : 140NRP95401C

Product Type : Coated Fibre Optic Repeater

Range of product : Modicon Quantum automation platform

Product or component type : Fibre optic repeater

Optic fiber type : Single mode

Bus current requirement : 750mA

Power dissipation in W : 5 W

Inrush current : 1.8 A at 5 V DC

Number of port :

2 fiber optic, connector type: LC

1, connector type: coaxial connector

Material : PC (polycarbonate)

Net weight : 0.5 kg

The Schneider Electric 140NRP95401C is a fibre optic repeater in the Modicon Quantum series designed for optimal data transmission. With power dissipation rated at 5 watts and an operational requirement of 750 milliamperes bus current, it is suited for various applications that necessitate robust signalling capabilities.

Technical specifications for 140NRP95401C

Manufacturer Schneider Electric

Product Type Fibre Optic Repeater

Product Line Modicon Quantum

Part Number 140NRP95401C

Power Dissipation 5 Watts

Required Bus Current 750 milliamperes

Local Signalling 4 green LED indicators and 3 red LED indicators

Inrush Current 1.8 Amperes at 5 Volts DC

Number of Ports Two ports for fiber optic connectors and one port for coaxial connector

Operating Altitude Up to 2,000 meters (6,561.68 feet) above sea level

Ambient Operating Temperature 0 to 60°C (in a non-condensing environment)

Rise/Fall Time 20 nanoseconds

Storage Temperature -40 to 85°C (in a non-condensing environment)

Fibre Optic Type Single mode

Receiver Sensitivity -25 decibel-milliwatts

Detected Silence -45 decibel-milliwatts

Humidity Tolerance 0 to 95% relative humidity (without condensation)

Description

The 140NRP95401C from Schneider Electric is a specialized fibre optic repeater that enhances signal transmission within industrial environments. Operating within a power dissipation of 5 watts and needing a bus current of 750 milliamperes, it is well-suited for high-performance applications. The inrush current peaks at 1.8 amperes at 5 volts DC, ensuring the device starts effectively. Designed for flexibility, it features two ports dedicated to fiber optic connectors and one port for standard coaxial connections, allowing for diverse networking configurations.

Local signalling is supported through a set of indicators; four green LEDs display standard operation, while three red LEDs alert users to potential issues. The device operates efficiently up to an altitude of 2,000 meters (6,561.68 feet) above sea level, maintaining performance in various settings. In terms of environmental conditions, this fibre optic repeater functions optimally in ambient temperatures between 0 to 60°C without condensation, and it has a storage temperature tolerance of -40 to 85°C in similar conditions. This repeater uses single mode fibre optics and has a receiver sensitivity of -25 decibel-milliwatts, enabling precise and reliable signal reception. It can detect silence down to -45 decibel-milliwatts, making it ideal for communication that requires minimal background noise.

With a weight of 1.21 pounds (0.55 kilograms), it remains lightweight for easy installation in various systems. The 140NRP95401C also tolerates humidity levels from 0 to 95% without condensation, adding to its versatility in different operating environments.