# **GRP-485 Isolated Repeater User Manual**

#### 1. Product Overview

The GRP-485 Isolated Repeater is a communication repeater equipped with automatic data flow control and direction detection features. It offers high-level protection and supports asynchronous operating modes. This CE-certified device provides a reliable solution for industrial automation systems and operates within a wide voltage supply range.

#### 2. Technical Specifications

# • Automatic Data Flow Control

The device automatically controls data flow at speeds up to 1 Mbps, eliminating the need for manual intervention.

# Automatic Data Direction Detection

Data flow direction is detected and routed automatically.

#### • 7 kV Galvanic Isolation

The device provides galvanic isolation up to 7 kV, enhancing safety and durability.

## Operating Modes

Supports asynchronous P2P (Point-to-Point) and M2P (Multi-Point) Half-Duplex operation modes.

#### Protection Features

- o **ESD Protection**: Provides protection against electrostatic discharge up to 8 kV.
- EFT Protection: Offers protection against electrical fast transients up to 4 kV.
- SURGE Protection: Protects against surge voltages up to 0.5 kV.

#### Power Supply

Operates within a 15-30VDC supply range, allowing flexibility in power source selection.

# CE Certification

Certified with the CE mark, ensuring compliance with European safety, health, and environmental standards.

## 3. Applications

The GRP-485 Isolated Repeater is ideal for use in industrial automation, communication systems, and applications requiring precise data transmission. Its high isolation and protection levels provide reliable performance even in challenging environmental conditions.

# 4. Power Supply

The device operates with a power supply in the range of 15-30VDC. Ensure that the power source falls within the specified range.

With these features, you can confidently use the GRP-485 Isolated Repeater to achieve high performance in data transmission.

