

SOYAL AR-485REP-V3 Multiple Isolated RS4485 Repeater **Instruction Manual**

Home » SOYAL » SOYAL AR-485REP-V3 Multiple Isolated RS4485 Repeater Instruction Manual



Contents

- 1 SOYAL AR-485REP-V3 Multiple Isolated RS4485 Repeater
- **2 Product Introduction**
- 3 Specification
- **4 Installation Wiring**
- 5 Documents / Resources
- **6 Related Posts**



SOYAL AR-485REP-V3 Multiple Isolated RS4485 Repeater



Product Introduction

Multiple Isolated RS485 Repeater The two sides of the communication and the power supply adopt triple-layer isolation design, which can provide RS485 clean transmission completely isolated from the system power supply

Feature

- 9-24VDC wide input, Triple-Zone DC/DC power isolation, built-in antisurge,
- static electricity, and lightning protection.
- The signal isolation strength of automatic direction detection can reach m3.0KV.
- Fully transparent data transmission; Support communication protocols such as MODBUS RTU and encrypted transmission.
- Industrial-grade RS-485 signal repeater and amplifier distance extender

RS485 wiring precautions

- 485 communication lines must use shielded twisted-pair; all 485 equipment on the lines must be connected to same GND ground.
- The theoretical length of 485 communication line should not exceed 1000 meters. According to actual
 experience and on-site environment, it is recommended that the total
 length should not exceed 500 meters, 485repeater should be added if it exceeds 500 meters
- The theoretical maximum of devices on the 485 bus should not exceed 64; If it exceeds, a 485 repeater should be added.
- The 485 bus must be a hand-in-hand bus structure, and resolutely avoid the way of star and bifurcation connection.
- The 485 wirings should be as far away from interference sources as possible such as high-voltage power

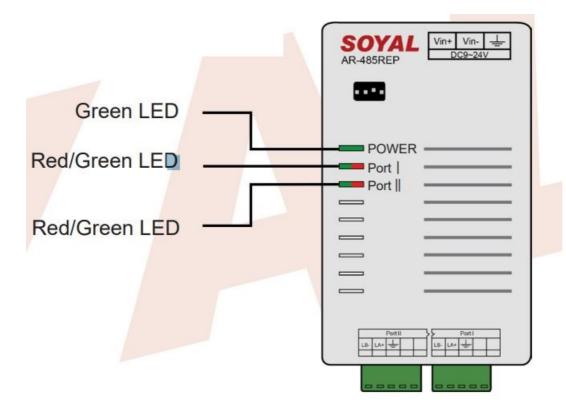
supply / electric mains / high-radio frequency signal cables, and not to be bundled together; if it is necessary to run with these cables in parallel, please add EMT conduit tube.

Specification

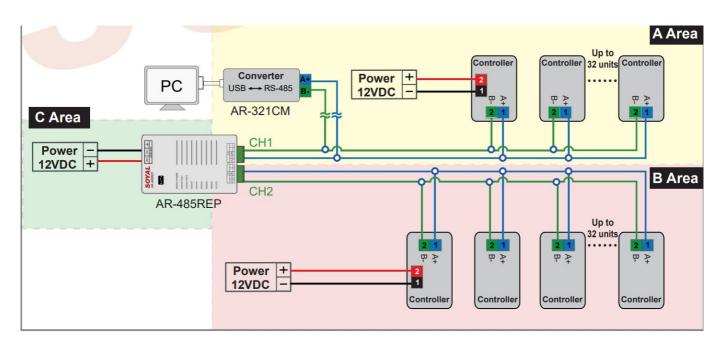
Model Name	AR-485REP-V3
Operating Voltage	9-24VDC
rated power	0.4W(9V/46mA : 12V/34mA : 24V15mA)
Communication rate	300-11500 bps
Operation Temperature	-20°C to +70°C
Surge Protection	3KV
Responsibility	1-64 nodes
Communication distance	0-1000 meters(theoretical value)
Housing Material	ABS
Dimension (mm)	106.5(H) x 66(W) x 27.7(D)
Weight (g)	approx. 50

Green LED (Power) will keep lighting up when powering on. Indicator

- Red/Green LED(Port | /Port ||) flashing means data is receiving from RS-485 is communicating.
- Red/Green LED (Port | /Port ||) flashing means data is receiving from RS-485 is communicating



Installation Wiring



Documents / Resources



<u>SOYAL AR-485REP-V3 Multiple Isolated RS4485 Repeater</u> [pdf] Instruction Manual AR-485REP-V3, Multiple Isolated RS4485 Repeater, AR-485REP-V3 Multiple Isolated RS4485 Repeater