## Remote I/O Manager, RHIO232

# - RS232 serial connection with Device Servers - 10 digital relay outputs, Max. 220V level

The Rhio232, is a Serial I/OManager enables Device Servers to control and monitor I/O devices. It is designed to connect to the Device Servers through RS232 interface of them.

The Rhio232 provides 12 optically isolated digital inputs (0 ~ 24V), 10 digital relay outputs ofmax. 220V level, 4 channel 10-bit resolution analog inputs for basic data acquisition. The digital output operation can be set up with basic programmable logic such as AND, OR, NOT and delay function. The analog inputs are configured either as alarmdetection using thresholdmechanismor general data acquisition. The input systemoperates in event-drivenmode that allows the unit to send data based on change-of-state or alarmconditions. All the inputs and outputs are protected fromdamage under power on/off conditions.

Usersmay configure the Rhio232 by using easy-to-useWindows-based utility software or by using telnet or serial console. The RhioManager, Windows utility also enables users to performthe basic I/O control andmonitoring for test purpose. Usersmay easily write their own application programto communicate with Rhio232 with the help of freeMFC libraries for Windows.

Typical application areas include:

- Remote Data Acquisition Systems
- Remote Data Acquisition
- Remote Distributed I/O Systems
- Automated Machine Monitoring
- Industrial Instrumentation
- Discrete Control
- Distributed Data Acquisition System

#### **Features**

- 12 optically isolated digital inputs (0 ~ 24V)
- 4 channel 10-bit resolution analog inputs for basic data acquisition
- Basic programmable logic output functions such as AND, OR, NOT and Delay
- Supports both wall and DIN-Rail style mounting
- Management using easy-to-use Windows utility
- Windows DLL support for the easier integration with user program

## Windows Utility, Rhio manager





### Remote I/O Manager, RHIO232

#### Panel Layout

Indicators for Power/RS232

Indicators for Power/RS232

Indicator Lamps for I/O

#### **Specifications**

#### Serial Interface

- RS232 with RJ45 connector

· Baud rate : 9,600 bps · Flow control : None

Data: 8 bit Stop: 1bit

#### Digital Input

- Number of channels : 12

- Input type : Voltage

- Input circuitry: Optically isolated photo-

coupler

- Input range : 0V  $\sim$  ±24V

OFF: 0V ~ ±1.2V ON: ±3.3V ~ ±24V

Sampling rate : 20msIsolation voltage : 5KV

#### Digital Output

Number of channels: 10Output type: RelayRated load: 3A/240VAC

- Insulation resistance : 1000Min(DC500V) - Electrical life expectancy : 100,000 operations

#### Analog Input

- Number of channels : 4

- Effective resolution : 10-bit

- Input type: Voltage, Direct coupling

- Input range : 0V ~ Aref (Analog reference

voltage, 2~5V)

- Sampling rate: 1000 samples/sec

#### Management

- Rhio Manager Windows Utility

#### **Software Support**

- Windows MFC DLL library

- I/O configuration, I/O status monitoring/control

#### Diagnostic LED

- Power, Link, Act

- Digital Output, 1~10

- Digital Input, 1~12

- Analog Input, 1~4

#### Power

Power Input Terminal Block for Analog/Digital Inputs

- 9V ~ 48VDC, Max. 5W

#### **Environmental**

- Operating temperature : 0°C to 50°C

- Storage temperature : -20°C to 66°C

- Humidity :

90% Non-condensing

#### Physical properties

- Dimension (L x W x H) 137 x 111 x 58 (mm) 5.4 x 4.4 x 2.3 (in.)

- Weight: 730g

#### Certification

- FCC, CE, MIC

#### Warranty

- 5-year limited warranty

#### Ordering Information

Rhio232

RHIO232 Serial I/O Manager

#### Includes

- Quick Start Guide
- CAT5 Cable
- RJ-45 DB9 Female Straight Cable Adapter
- DIN-rail Mount Bracket



U.S. / Canada / South America

Tel: +1 (408) 573-7425 Fax: +1 (408) 907-3738 Toll Free (US/Canada): 1-8668-US-SENA (1-866-887-7362)

EU / Africa

Tel: +33 (0) 1 53 53 16 29 Fax: +33 (0) 1 70 24 70 90

Asia / Pacific

Tel: +82-2-576-7362 Fax: +82-2-573-7710

#### Contact us via E-mail

General Information: info@sena.com Sales & Distribution: sales@sena.com Technical Support: support@sena.com

