

Reliable Controls MACH-System

Reliable controls

...people and technology you can rely on™

MODBUS INTERFACE DEVICE

MOUNTS DIRECTLY TO EQUIPMENT OR IN ENCLOSURE

FULLY PROGRAMMABLE, AND NETWORKABLE DEVICE WITH 2 DIGITAL INPUTS

IDEAL FOR ROUTING LAN/WAN COMMUNICATIONS TO TWISTED PAIR MS/TP NETWORKS

EASY TO WIRE 45 DEGREE REMOVABLE CONNECTORS

DATA ACQUISITION AND DATA STORAGE ONBOARD

ROBUST POWDER-COATED STEEL PACKAGE

5 YEAR WARRANTY

MODBUS-Link™ PORTAL



The Reliable Controls® MODBUS-Link™ portal provides MODBUS device communication within the Reliable Controls® MACH-System, and ships with the Reliable Controls® **industry best** 5 year warranty.



The Reliable Controls[®] MODBUS-Link™ portal is a multi-protocol, fully programmable communications device that provides connectivity between Modbus networks and any Reliable Controls[®] MACH-System. The MODBUS-Link™ portal provides a 10BaseT connection to an Ethernet backbone, a 2 wire-EIA-485 connection to Modbus devices, and a EIA-232 connection to service PC or Modem communications. The MODBUS-Link™ portal ships standard with robust powder-coated steel packaging and removeable connectors.

TECHNICAL SPECIFICATION

Processor

- 40 MHz, high-performance, 16-bit embedded microcontroller

Memory

- 512k NV RAM
- 512k Flash EEPROM operating system firmware and controller configurations

Supply Voltages

- 24 VAC/VDC, 5 VA

Communications

- IEEE 802.3 Ethernet 10BaseT
- EIA-485 @ 76.8 kbps max
- EIA-232 @ 57.6 kbps max. PC or Modem

Inputs

- 2 digital 40 Hz pulse counting (supports flow meters)
- 24 VAC over voltage protection-

Real-Time Clock

- ±1 second per day

Memory/RTC Backup

- 1 year by lithium battery (offline)

Dimensions

- 15.7 cm L x 10.8 cm W x 2.5 cm H (6.2" L x 4.3" W x 1.0" H)

Mounting

- #8 clearance holes on 14.6 cm L x 9.4cm W (9.7" L x 3.2" W) centers

Weight

- 0.25 kg (0.6 lb.)

Ambient Limits

- Operating: 0 °C to 40 °C (32 °F to 104 °F)
- Shipping: -20 °C to 60 °C (-40 °F to 140 °F)
- Humidity: 10% to 90% RH non-condensing

FEATURES

Protocol

- BACnet[®]
 - B/IP (Ethernet)
 - ISO 8802-3
 - PTP (EIA-232)
- Reliable Controls[®]
 - Ethernet (IP)
 - PC & Modem (EIA-232)
- Modbus (Master)
 - RTU Network (EIA-485)

128 Control-BASIC™ Programs

- User programmable control strategy in a readable, BASIC-like language
- 2500 bytes per program

2 Inputs

- Digital or pulse

256 Variables

- Selectable standard and custom ranges, as well as fixed program-driven values

64 Controllers

- Standard P, PI, or PID controllers for closed loop control

96 Trend Logs

- Each trend log stores 255 samples of 6 points at programmable time intervals

128 Runtime Logs

- Totals the on time and records the on/off times of a digital point
- Holds 200 samples

64 System Groups

- Allows related points to be grouped on to one display
- 160 points/group

32 Weekly Schedules

- 4 on/off times for each weekday and 2 override days

8 Annual Schedules

- Days of the year designated as holidays

48 Variable Arrays

- Up to 128 elements in a one-dimensional array

128 User Passwords

- Protects access to system
- Each user is assigned a user name and an access level

5 Custom Tables

- For creating custom scaling functions

16 Custom Units

- 8 analog engineering units
- 8 digital engineering units

127 Network In Points

127 Network Out Points

Real Time Clock

Warranty

- 5 years

ORDERING

ML

- MODBUS-Link™ portal

APPLICATION DIAGRAM

