DeviceMaster® EIP-2304

Part Number: 99611-8

KEY FEATURES AND BENEFITS

- DIN rail mounting
- Low profile, compact housing facilitates easy installation and mounting
- Wide DC input voltage range (5-30 volts)
- Redundant power input for fail-safe power
- Wide operating temperature range (-40° to 75°C)
- RS-232/422/485 software selectable interfaces
- DB9 Male serial connectors
- Dual 10/100 Ethernet Ports
- Screw terminal power connector
- 25KV surge protection for serial ports
- Application compatibility supports native COM, TTY, or TCP/IP socket communication modes
- Web-based configuration makes setup and management changes quick and easy
- PortVision® DX for quick setup and remote management
- Security via SSL & SSH connections, SSL serial data stream encryption
- NEMA TS2 Certified

NEMA TS2 | EXTENDED TEMPERATURE RATINGS | PORTVISION DX MANAGEMENT SOFTWARE | MADE IN USA

PRODUCT DESCRIPTION

The DeviceMaster EIP-2304 is the newest model in Comtrol's popular line of DeviceMaster serial device servers. This product can be used to network-enable two serial devices on any Ethernet network and are ideal for applications in:

- Traffic and Transportation
- Power Utility
- Industrial Automation
- Material Handling
- Any project that requires serial-to-Ethernet communication with DIN rail-based equipment installations

The DeviceMaster EIP-2304 includes DIN-rail mounting and screw terminal power connections for convenient installation. It offers both wide DC input voltage range (5-30 volts) and wide operating temperature range (-40° to 75°C), so it operates reliably in a variety of challenging physical environments. It provides redundant DC power input for fail-safe power.

The DeviceMaster EIP-2304 is National Electrical Manufacturers Association (NEMA) TS2 compliant. And with 2 Ethernet ports, you can daisy-chain or cascade devices together for a cleaner layout, a faster installation and a more cost-effective solution (no need for multiple Ethernet switches or star topology layouts).

The DeviceMaster EIP supports software selectalbe RS-232, RS-422 and RS-485 serial communications at standard baud rates from 300bps to 230Kbps.

Your automation, our passion.

DEVICEMASTER SPECIFICATIONS

HARDWARE

Bus Interface Specification
10/100 BASE-T Ethernet

Memory

SDRAM	32 MB
Flash	8 MB

Enclosure
UL94-V0 Plastic

Installation Method
DIN rail (35mm)

Network Protocols Available
EtherNet/IP™

LED Indicators
Status, Ethernet Port Link and Activity

Enclosure Dimensions
4.6" x 3.9" x 1.8"
116.8 x 99.1 x 45.7 mm

Product Weight
0.45 lbs
204.12g

ELECTRICAL SPECIFICATIONS

DC Input Voltage
5-30 V

Power Consumption (max)
3.0 W

Power Input Redundancy
Dual Redundant Power Input

ESD Surge Protection
Provides minimum of 25KV protection on all serial lines.
All Ethernet components are rated to 1.5KV magnetic
surge protection.

ENVIRONMENTAL SPECIFICATIONS

Air Temperature

System On	-40 to 75° C
System Off	-40 to 85° C

Operating Humidity

Non-condensing	0% to 95%

Altitude
0 to 10000 Feet
3,048 m

Mean time between failures
42.3 Years

SERIAL COMMUNICATIONS

Connector Type
DB9M

Number of Ports
4

Serial Interfaces
RS-232, RS-422, RS-485 2-Wire, RS-485 4-Wire (Master/
Slave)

Termination Resistor for RS422/485
Software controllable 120Ω termination resistors available
for each transmit and receive differential pair on every
port. The 120Ω termination resistors can be enabled
between TX+ and TX- OR RX+ and RX- or both on every
port

Baud Rates
300 to 230.4Kbps

Receive Buffer	4.5KB
Transmit Buffer	4.5KB

Serial Port Control

Data Bits	5, 6, 7 or 8
Parity	odd, even mark, space or none
Stop Bits*	1, 1.5, or 2
Flow Control	Hardware, Software or None

* Stop bit 1.5: Supported only when used with 5 data bits

ETHERNET SPECIFICATIONS

Number of Ports
2

Speed
10/100Mbps

Connector Types
RJ45F Auto MDI/MDI-X

LED
Ethernet Link (Green)
Ethernet Activity (Amber)

Ethernet Specific Features
Ethernet packet switching, Auto Negotiation, Link/Activity
Status LED

Network Protocols
ARP, BOOTP, DHCP/RARP, HTTP, HTTPS, SSH, SSL/TLS,
SNMP (MIB-II), Telnet, and TFTP, and supports IP multicast
data transmission

ETHERNET/IP FEATURES

Supported PLC's
Including but not limited to:
Allen Bradley: ControlLogix, CompactLogix, FlexLogix,
SoftLogix, SLC 5/05, PLC-5, and MicroLogix Models

Web Page Configuration
· Three methods of receive communication to the PLC –
Write-to-Tag/File, Write-to-Tag/File-Synced, and Polling
· Connectivity – Ethernet/IP to serial and Ethernet TCP/IP
raw/ASCII devices
· Connectivity to high-speed devices. Supports message
rates as high as 50 updates per second when receive
mode is configured to Write-to-Tag/File.
· Vendor Specific CIP objects – configuration, data
transfer, and statistics
· Large received packet support – up to 1518 bytes serial
and 2048 bytes Ethernet TCP/IP
· Received packet size control – truncate or drop
oversized packets
· Message Throttling – ensures PLC can process each
received data packet
· Intelligent packet identification – start and end of
transmission character detection/appending

Diagnostics
Yes

Electronic Data Sheets
Yes

Sample PLC Programs
Yes

FEATURES

SNMP Support
Monitoring Only

Other Software Features
PortVision DX remote management

Manufacturer's Warranty
5 Years

EXPORT INFORMATION

Packaged Shipping Weight
0.85 lbs
386g

Package Dimensions
6 3/4" x 5 7/8" x 3 1/2"
171.45 x 149.225 x 88.9 mm

UPC Code
7-56727-99611-8

Country of Origin
USA

ECCN
5A992

Schedule B Number
8471.80.1000

REGULATORY STANDARDS

Emission
FCC Part 15 Subpart B: Class A limit
Canadian EMC Requirements: ICES-003
European Standard EN61000-6-4
European Standard EN55022
AS/NZS CISPR 22

Immunity
European Standard EN61000-6-2
European Standard EN55024
IEC 1000-4-2/EN61000-4-2: ESD
IEC 1000-4-3/EN61000-4-3: RF
IEC 1000-4-4/EN61000-4-4: Fast Transient/Burst
IEC 1000-4-5/EN61000-4-5: Surge
IEC 1000-4-6/EN61000-4-6: Conducted Disturbance
IEC 1000-4-8/EN61000-4-8: Magnetic Field
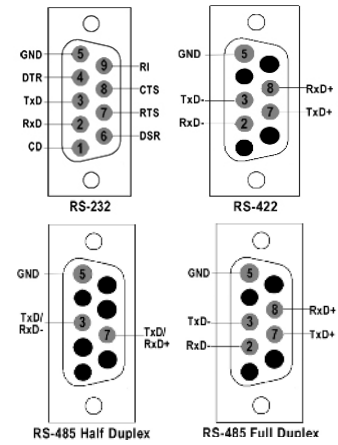IEC 1000-4-11/EN61000-4-11: Dips and Voltage Variations

Safety
UL 61010-1, UL 61010-2-201
CSA C22.2 No. 61010-1-12
CSA C22.2 No. 61010-2-201:14

REGULATORY APPROVAL MARKS

CE FC c(UL)us NEMA TS2

PIN ASSIGNMENTS

RS-232   RS-422

RS-485 Half Duplex   RS-485 Full Duplex