DeviceMaster® DM-2304

Part Number: 99610-1

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
- Software selectable termination resistors for RS-232/422/485
- 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 or Windows configuration makes setup and management changes quick and easy
- Real-time e-mail event notification alerts administrator of potential connection and security issues
- 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 DM-2304 is the newest model in Pepperl+Fuchs Comtrol's popular line of DeviceMaster serial device servers. This product can be used to network-enable four 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 DM-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 DM-2304 is National Electrical Manufacturers Association (NEMA) TS2 compliant. With two 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 DM supports software selectalbe RS-232, RS-422 and RS-485 serial communications at standard baud rates from 300bps to 230Kbps. Software selectable termination resistors also provided to enable easy and reliable installations.

Your automation, our passion.

DEVICEMASTER SPECIFICATIONS

HARDWARE

Interface Specification
10/100BASE-T Ethernet

Memory

SDRAM	32 MB
Flash	8 MB

Enclosure
UL94-V0 Plastic

Installation Method
DIN Rail (35mm)

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 cm

Product Weight
0.45 lbs
204.12 g

ELECTRICAL SPECIFICATIONS

DC Input Voltage
5-30 VDC

Power Consumption (max)
3.0W

Power Input Redundancy
Dual Redundant Power Input

ESD Surge Protection
Provides minimum of 25KV protection for 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
0 to 3,048 m

Mean time between failures
42.3 Years

SERIAL COMMUNICATIONS

Connector Type
DB9 Male

Number of Ports
4

Interface Standard
RS-232
RS-422
RS-485, 4-wire, Master
RS-485, 4-wire, Slave
RS-485. 2-wire

Termination Resistor
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 bps to 230Kbps

Transmit Buffer
4.5KB

Recieve Buffer
4.5KB

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, None

* Data bits 5, 6: Supported only in RFC2217 and socket mode
** Mark, Space parity: Supported only in RFC2217 and socket mode
*** Stop bit 1.5: Supported only when used with 5 data bits

ETHERNET SPECIFICATIONS

Number of Ports
2

Speed
10/100Mbps

Connector Type
(1) 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, ICMP, RFC 1006 (ISO over TCP), SNMP (MIB-II), TCP/IP & UDP socket services, Telnet, and TFTP, and supports IP multicast data transmission

FEATURES

SNMP Support
Monitoring Only

Other Software Features
Lowest Latency
NS-Link COM/TTY port redirector
TCP/IP & UDP Socket Services
Telnet/RFC2217 COM Port control
PortVision DX remote management

Manufacturer's Warranty
5 Years

EXPORT INFORMATION

Packaged Shipping Weight
0.85 lbs
386 g

Package Dimensions
5-11/16" x 5-11/16" x 3-3/8"
144.46 x 144.46 x 85.73mm

UPC Code
7-56727-99610-1

Country of Origin
USA

ECCN
5A992

Schedule B Number
8471.80.1000

DEVICE DRIVERS

Linux
Microsoft® Windows® XP through Windows 10

REGULATORY STANDARDS

Emissions
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:
IEC1000-4-2/EN61000-4-2: ESD
IEC1000-4-3/EN61000-4-3: RF
IEC1000-4-4/EN61000-4-4: Fast Transient/ Burst
IEC1000-4-5/EN61000-4-5: Surge
IEC1000-4-6/EN61000-4-6: Conducted Disturbance
IEC1000-4-8/EN61000-4-8: Magnetic Field
IEC1000-4-11/EN61000-4-11: Voltage 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

Other
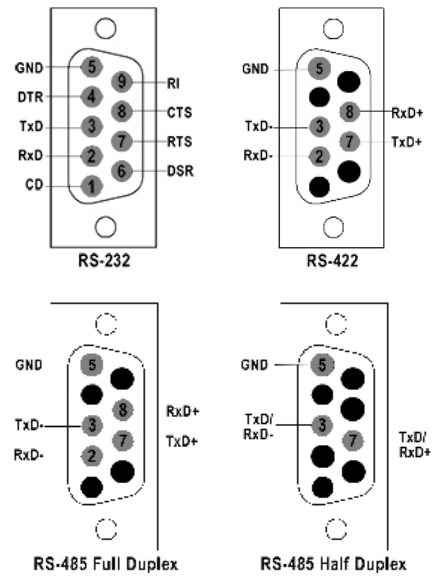European Standard RoHS2 Certified
NEMA TS2

REGULATORY APPROVALS

CE cULus

PINOUT DIAGRAMS

RS-232

RS-422

RS-485 Full Duplex

RS-485 Half Duplex

COMTROL
Pepperl+Fuchs