

DeviceMaster RTS

Models: 98751-2, 98750-5

DeviceMaster RTS is the ideal solution for connecting serial devices and running applications that can benefit from “real-time” performance. With DeviceMaster’s developer kit, RTS can even be programmed to perform a wide variety of local processing tasks, including:

- Data protocol conversion
- Data routing
- Data validation
- Data tagging
- Data logging



Embedded Systems—Ready for Mainstream Deployment

The DeviceMaster embedded computer family of *low-cost, solid-state microcomputers* provides a *powerful platform* for performing *application-specific tasks*.

No Assembly Required!

DeviceMaster comes ready-to-use right out of the box. All of the hardware integration and software customization is done, so you simply select the model you need for your particular application, and go!

Application Server Replacement

If you are deploying a general-purpose Microsoft® Windows® or Linux server to enable device connectivity, control, or local processing—save yourself some money. The developer kit provides the platform information and existing source code required to extend the capabilities of DeviceMaster RTS with your own applications.

Customize a Little—Customize a Lot

Deploy DeviceMaster RTS right out of the box for fast, efficient, and cost-effective device connectivity. Fully programmable utilizing DeviceMaster developer kit (and/or generally available GNU tools from Red Hat, Inc.) Customize the embedded Web server with enhanced HTML pages. Java apple serving support. Select specified events for e-mail notification—or create your own. This developer kit makes it easy to port or develop an application to run on the platform.

Cost-of-Ownership

The real cost of owning a server extends well beyond the initial hardware purchase price to include software, expansion cards, and, most importantly, system maintenance. The cost to dispatch a technician to a remotely deployed server often costs more than the server itself! DeviceMaster reduces cost-of-ownership by eliminating the need to deploy technicians with its state-of-the-art automatic server reset and remote maintenance capabilities.

NS-Link™—The Industry’s First Network Port Extender

NS-Link software uses standard TCP/IP protocol to provide transparent COM and TTY port access across Ethernet networks, enabling applications to seamlessly interact with those ports as if they were locally attached to the application server—ensuring application compatibility without compromising performance. Unlike competing port redirectors that have difficulty supporting high-density data communications traffic, NS-Link performance does not degrade as ports are added. What's more, NS-Link SocketServer™ mode makes ports available to the software via TCP/IP socket connections, eliminating the need for OS-specific drivers and allowing “tunneling” between units over any distance via Ethernet.

Software Selectable Ports—The Industry’s First COM Port “Software Toggle”

A software-selectable port option enables users to configure the port interface using software controls, easily switching from RS-232, RS-422, or RS-485. Ports can be assigned protocols uniquely and can be mixed on the same platform.

- *System Reliability.* With no moving parts, DeviceMaster RTS won’t crash due to hard drive system failure. And the dreaded “blue screen” will never appear because the system uses a highly reliable, real-time, deep embedded operating system.
- *Real Plug-and-Play.* Once it is physically connected to the Ethernet hub, the system can be set up, configured, and monitored over a LAN, WAN, or even the Internet. (No training required!)
- *Watchdog and Reset.* If the system incurs a software fault, a built-in watchdog/reset circuit can automatically restart it.
- *Event Notification.* Configuration options provide event notification capability, so that when a specified event occurs, the system will send an e-mail to the designated engineer.

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- *Network Monitoring and Software Download/Reload.* When the system is connected to the network, performance can be monitored using a Web browser. If the software on the system requires update or reload, that also can be accomplished remotely over the network—saving engineer travel time and expense.

System Specifications

Base System

- Solid-state embedded microcomputer powered by a 44 MHz ARM7 processor running Red Hat's eCos real-time operating system.
- Data storage and local application processing supported by 4MB onboard Flash and 8MB onboard RAM.

Network Interface

- 10/100Base-T Ethernet connectivity with built-in hub and downstream port for “daisy-chaining” systems or network-ready devices.

Peripheral/Device Communication

- Powered by a proprietary high-performance serial processor for sustained, simultaneous data throughput at 230 Kbps on all ports.
- Software-selectable ports supporting RS-232, RS-422, or RS-485 interfaces.

Application Software Port Access

- Application software running under a supported operating system can access ports with NS-Link software.
- Applications software can access serial ports via TCP/IP sockets from anywhere on the network using SocketServer™ software.

Management and Diagnostics

- Browser-accessible HTML interface provides easy setup and configuration through local network or Internet
- SNMP client for system monitoring
- System watchdog with automatic reset
- User-selectable event monitoring and e-mail notification of event activity
- Software updates via network download

Power Supply:

100-240V AC Input, 24V DC Output

Dimensions:

4-port: 10.8L x 6.3W x 1.5H in (27.4 x 16.0 x 3.8 cm)

8-port: 10.8L x 6.3W x 1.8H in (27.4 x 16.0 x 4.6 cm)

Temperature Operating Range:

0-45 °C

Regulatory Approvals:

FCC, Class A, CE, UL, CUL, C-tick

Model Number:	Ports:	Communications:	Connector:	Bus Type/max.:	Port Speed:
98751-2	4	RS-232/RS-422/RS-485	DB9 Male	10/100Base-T	230K
98750-5	8	RS-232/RS-422/RS-485	DB9 Male	10/100Base-T	230K