MatchPort® NR
Embedded Ethernet Device Server

THE ULTIMATE IN FLEXIBILITY, SECURITY, PERFORMANCE
AND AFFORDABILITY IN EMBEDDED NETWORKING

MatchPort® NR enables you to build networking into virtually any electronic device with a serial interface. With this full-featured, turnkey embedded device server module your products can be accessed and controlled over the Internet!

Pin-compatible Wireless/Wired Module Family
MatchPort NR is part of a family of pin and form-factor compatible wireless and wired module solutions. The MatchPort family enables you to “future proof” your designs with a choice of flexible media independent 802.11 b/g or Ethernet networking products. It takes the complexity out of RF design and embedded Ethernet networking, enabling you to focus on your products.

Complete Network Processing Module
MatchPort NR is a dedicated co-processor module that manages network activity, permitting the device’s host microprocessor to function at maximum efficiency.

Powered by a Lantronix DSTni™ x86 class processor SoC with 256 KB of on-chip SRAM, MatchPort NR also includes 2MB of Flash memory for web page storage and firmware.

+ Extremely affordable embedded networking
+ Common platform form factor for a family of wired and wireless modules
+ Build Ethernet or IP networking into your products quickly and easily
+ 256-bit AES end-to-end encryption for secure communications
+ Full TCP/IP stack, web server and Windows deployment software
+ Two serial channels; up to 921 Kbps data rate
+ EMC/EMI-compliant; RoHS compliant
+ Compact: 45mm x 45mm with 40-pin 2 mm header
Robust, Feature-Rich Software Suite
Eliminating the need to negotiate the intricacies of Transmission Control Protocol (TCP) or Internet Protocol (IP), MatchPort NR incorporates:

- Robust operating system
- Full featured network protocol stack, including full TCP/IP stack
- Proven, ready-to-use serial-to-ethernet application
- Built-in web server for device communication and configuration via a standard browser
- Windows-based DeviceInstaller™ – making configuring one or more units in a subnet quick and easy

FEATURES

- **Serial Interface**
  - Two Serial Ports
  - Interface: CMOS (Asynchronous) 3.3V-level signals, rate is software selectable (300 bps to 921,000 bps)
  - Serial Line Formats: 7 or 8 data bits, 1-2 Stop bits
  - Parity: odd, even, none
  - Modem Control: DTR, DCD
  - Flow Control: XON/XOFF (software), CTS/RTS (hardware), none

- **Network Interface**
  - 10Base-T/100Base-TX Ethernet connectivity (using RJ45 jack)
  - Protocols Supported: ARP, UDP, TCP, Telnet, ICMP, SNMP, DHCP, BOOTP, Auto IP, HTTP, SMTP, TFTP, RFC 2217 (Telnet)

- **Management**
  - Internal web server
  - SNMP (read only)
  - Serial login
  - Telnet login
  - DeviceInstaller software

- **Security**
  - 128, 192, 256-bit AES Rijndael encryption

- **Internal Web Server**
  - Serves web pages
  - Storage capacity: 1.2 MB

- **Architecture**
  - CPU, Memory: Lantronix DSTni-EX x86 CPU, on-chip 256 KB zero wait static SRAM, 2,048 KB Flash, 16 KB Boot ROM, 8 GPIO
  - Firmware: Upgradeable via TFTP and serial port

- **Power Consumption**
  - Average Power Consumption: 194mA at 3.3V CPU @ 48MHz, 100Mbps

- **Environmental**
  - Operating range: 40° to 85°C (40° to 185°F)
  - Storage range: -40° to 85°C (40° to 185°F)

- **Packaging**
  - Dimensions: 44.4 x 44.4 x 10.4 mm (1.75 x 1.75 x .41 in)
  - Weight: 14g
  - Material: Plastic shell, 260°C tolerant

- **2-year limited Warranty**
- **Included Software**
  - Windows’ 98/NT/2000/XP/Vista based DeviceInstaller configuration software and Com Port Redirector,™ Web-Manager

**MATCHPORT NR DEMONSTRATION KIT**
The demonstration kit contains the key accessories to evaluate a MatchPort NR product:
- MatchPort NR demonstration board
- RS-232 cable, DB9F, null modem
- Cat5e UTP RJ45M/M Ethernet cable
- 3.3V power supply
- Antenna (Included for use with wireless modules – not for MatchPort NR use) Note: MatchPort NR sample must be purchased separately.

*The included DeviceInstaller software makes configuration quick and easy!*

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>MP5002000-01</td>
<td>MatchPort NR AES bulk pack</td>
</tr>
<tr>
<td>MP500200S-01</td>
<td>MatchPort NR AES sample case</td>
</tr>
<tr>
<td>MP10010NMK-01</td>
<td>One MatchPort NR enclosed Free Secure Com Port Redirector™ evaluation license</td>
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</tbody>
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*Order quantities of up to 10*

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