

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!

Search	Exclude	Assign IP	Type	Name	Group	IP Address	Hardware Address
Local Area Connection (172.18.25.3)							
			EDS18PR			172.18.23.115	00:20:4A:8E:31:A0
			EDS18PS			172.18.17.159	00:20:4A:8E:6B:73
			EDS32PR			172.18.11.27	00:20:4A:8E:1D:77
			EDS32PR			172.18.17.200	00:80:A3:06:27:03
			EDS4100			172.18.32.20	00:20:4A:83:8E:68
			EDS4100			172.18.30.15	00:20:4A:85:8E:79
			EPS2100		EPS_66FCSA	172.18.17.80	00:80:A3:66:FC:64
			ETS18PR		ETS_2339F2	172.18.18.130	00:80:A3:23:83:F2
			SCS			172.18.11.192	00:20:4A:8E:19:2E
			InetBox I/O 2100			172.18.17.30	00:20:4A:8E:41:94
			UDS			172.18.11.183	00:20:4A:8E:25:13
			MatchPort b/g			172.18.32.17	00:20:4A:8E:25:12
			Wireless			172.18.25.80	00:80:A3:21:01:C4
			XPort		MPS_1F01C4	172.18.11.22	00:80:A3:66:CE:38
			XPress		MSS_212F68	172.18.23.198	00:80:A3:66:CE:38
					MARTY	172.18.31.133	00:80:A3:61:28:F7
					SCS_5704F5	172.18.17.225	00:80:A3:57:04:F5
					SCS_5704FF	172.18.32.16	00:80:A3:57:04:FF
					SCS_5600A	172.18.19.40	00:80:A3:56:00:A0

ORDERING INFORMATION

+ Part Number

MP5002000-01

MP500200S-01

MP10010NMK-01

+ Description

MatchPort NR AES bulk pack

Minimum order quantity 50 units

MatchPort NR AES sample case

- One MatchPort NR enclosed
- Free Secure Com Port Redirector™ evaluation license

Order quantities of up to 10

MatchPort NR Demonstration Kit

