

MDS Mercury 900™

Smart Wireless IP/Ethernet Connectivity



Features/Benefits

- Multiple interfaces, to include USB, PCMCIA card slot, Ethernet, Serial, and built-in GPS.
- Low maintenance, industrial-grade, highly durable solutions with metal enclosures.
- The ability to withstand brutal operating conditions and temperatures from -30°C to +60°C (-22°F to +140°F).

Applications

- Mobile Data
- Long range wireless Ethernet
- Gateway for serial/legacy networks and/or devices to IP network
- Video and/or Voice-over-IP
- Portable network access for vehicle based operation

MDS...Global wireless solutions. Industrial Wireless Performance.

For nearly two decades, Microwave Data Systems (MDS) has been providing highly secure, industrial strength mission critical wireless communications solutions for a broad spectrum of public and private sector clients worldwide. With an installed base approaching 1,000,000 radios in 110 countries, MDS offers both licensed and license-free solutions with applications in SCADA, telemetry, public safety, telecommunications, and online transaction markets.

Introducing MDS Mercury 900™

The MDS Mercury 900™, based on Orthogonal Frequency Division Multiplexing (OFDM), provides optimal IP communications for reliable, high speed, long-range communications in a private wireless data network. The MDS Mercury 900 is optimized for your mobile data applications and provides the best combination of range and speed available on the market today.

High-Speed Mobile Data Solution.

With adaptive data rates up to 1.5 Mbps and superior data compression, the MDS Mercury 900 with our middleware option provides the high speeds and availability required by today's high-bandwidth intensive applications.

Coverage.

Long-distance capabilities—2 to 10 times the range of other private, license exempt wireless solutions.

Security.

Multiple levels of security, including password protection, 128-bit encryption, dynamic key rotation, RADIUS authentication, and Frequency Hopping Spread Spectrum (FHSS) technology.

Ubiquity.

Migrate seamlessly between multiple disparate IP networks, public and private. Sophisticated middleware maintains application persistence, and provides dynamic selection of the strongest available communications channel.

Why use an MDS Mercury 900™ Wireless Networking Solution?

A private network, offering high reliability, even in crisis situations, with no monthly transaction charges.

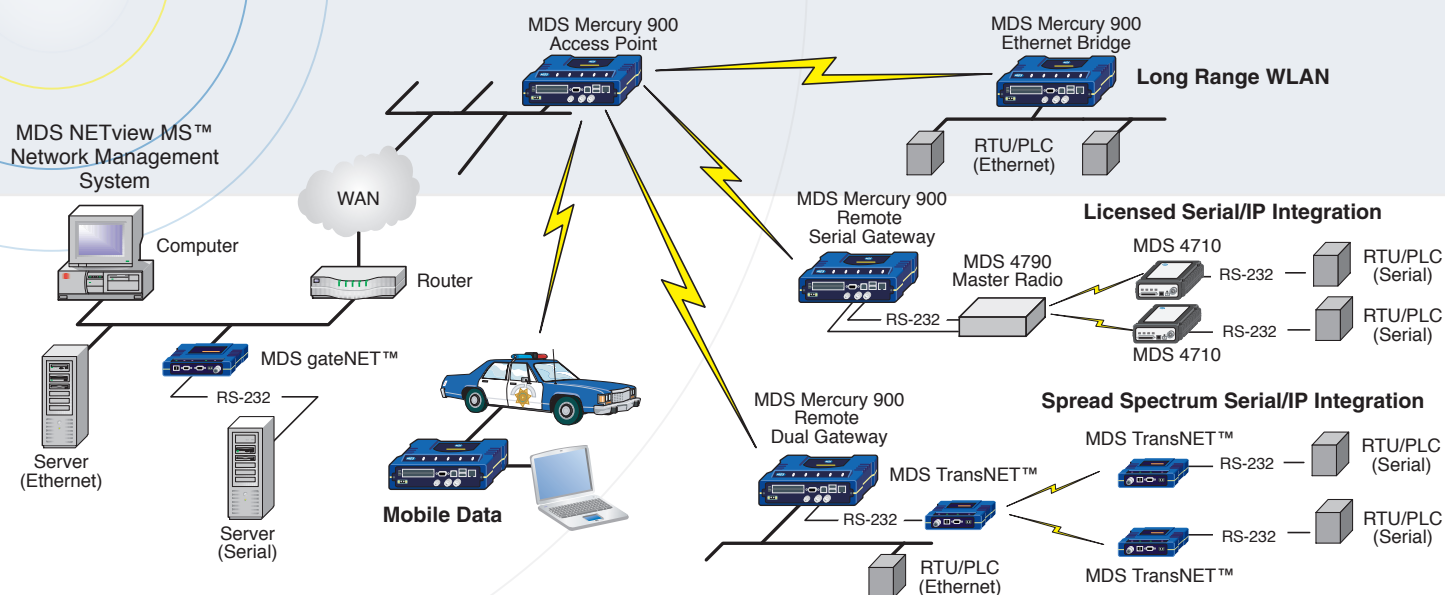
Increased efficiency —agencies see an attractive return on investment within 12 to 24 months.

Scalability, so you can easily add to your infrastructure as your network grows.

Powerful, distributed network management capabilities.

INDUSTRIAL WIRELESS PERFORMANCE

MDS Mercury 900™ Specifications



General

- Frequency Band: 902-928 MHz ISM band
- Modulation: Orthogonal Frequency Division Multiplexing (OFDM)
- Data Rate: Up to 1.5 Mbps adaptive
1,200 – 115,200 bps serial port
- Configurations:
 - Access Point/Remote Dual Gateway
 - Serial and Ethernet
 - Remote Serial Gateway
 - Serial only
 - Remote Ethernet Bridge
 - Ethernet only (with multi-drop capability)

Radio

- Receiver Sensitivity: -86 dBm through -101 dBm with 10⁻⁶ BER
- Carrier Power: 0.1 to 1 watt
- Output Impedance: 50 Ohms
- Input Power: 10.5-30 Vdc (13.8 Vdc nominal)
- Current Consumption:
 - Rx: 2.8 W from 10.5 to 24 Vdc
 - Rx: 3.5 W from 24.5 to 30 Vdc
 - Tx: 8 W from 10.5 to 24 Vdc
 - Tx: 9 W from 24.5 to 30 Vdc

Management

- HTTP (embedded web server),
- TELNET, local console
- SNMPv1/v2/v3,
- MIB II,
- Enterprise MIB
- SYSLOG
- MDS NETview MS™ compatible

Ethernet Interface

- 10BaseT, RJ-45
- IEEE 802.3, Spanning Tree (Bridging), IGMP, IP (DHCP, ICMP, UDP, TCP, ARP)

Serial Interface

- Com1: RS-232/V24, DB-9F, DCE
- Encapsulation over IP (tunneling) for serial async multidrop protocols

Antenna Interface

- TNC connector

Other Interfaces

- Two PCMCIA Slots
- USB Device and Host ports
- Built-in GPS

Environmental

- Temperature: -30°C to +60°C (-22°F to +140°F)
- Humidity: 95% at 40°C (104°F) non-condensing
- LEDSGPS (Optional), PWR, COM1, LINK, USB, LAN

Mechanical

- Case: Die Cast Aluminum
- Dimensions: 5.715 H x 20 W x 12.382 D cm. (2.25 H x 7.875 W x 4.875 D in.)
- Weight: 1kg (2.2 lb.)
- Mounting options Flat surface mount brackets, DIN rail, 19" rack tray

Agency Approvals (Pending)

- *FCC Part 15.247
- UL/CSA Class 1 Div. 21 (UL 508, UL 1604)
- IC

** This device has not been approved by the FCC. This device may not be sold or leased, or offered for sale or lease until approval of the FCC has been obtained.*



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MDS products are manufactured under a quality system certified to ISO 9001. MDS reserves the right to make changes to specifications of products described in this data sheet at any time without notice and without obligation to notify any person of such changes.
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