Magnum MNS-INOS
Industrial Network Operating System for Magnum 10RX Router and Security Appliances

The Magnum Industrial Network Operating System for Magnum 10RX family of routers (MNS-INOS) provides the functionality needed by industrial routers and security appliances. A full range of routing software with security and redundancy features enable the Magnum 10RX routers to perform in harsh industrial environments.

- **Add extra security** with the MNS-INOS with features such as IPSec, VPN, firewall, encryption and authentication for industrial cybersecurity
- **Ethernet ports** can be configured as switched or routed ports and serial ports can be software configured as RS-232 or RS-485 ports for customization
- **Built-in protocol analyzer** for easy trouble shooting with an event log to provide a log of most recent events

**Key Features**
- Graphical user interface (GUI) and CLI
- Redundancy features such as routing, STP, VRRP, BGP, OSPF
- Supports all Magnum 10RX platforms and configurations
- Remote access for secure administration is via SSH and optionally via telnet
- WAN configuration provides the necessary menus to configure a T1/E1, Channelized T1E1 or DDS circuits
- SNMP supports v1, v2 and v3 for managing the device using Network Management Systems
- PPP allows for an asynchronous dial-in backup connection over an analog modem or framing for DDS
- Advanced routing and security available by default without any additional licenses
Benefits
MNS-INOS includes features needed to connect a variety of different devices and interface types to a routed network. An improved user experience is achieved through a focus on ease of use and simple configurations options such as user accounts, export configurations, loading new images and time synchronization.

Markets
MNS-INOS was developed specifically to meet the requirements of industrial networks for applications such as automotive production, transportation, and power transmission and distribution.

Applications
Cybersecurity is essential for today's industrial networks and critical infrastructure. MNS-INOS software provides IPSec VPN for secure connection to another remote location over a public network such as the Internet.

Safety of the router itself is of equal importance along with protecting the network. MNS-INOS provides secure access, remote authentication and multi-level login and user privileges.

MNS-INOS offers management of security certificates, secure connectivity to serial ports and secure communications for connected devices. Connectivity is crucial for industrial applications, especially legacy equipment that lacks direct connectivity to IP networks. MNS-INOS supports asynchronous serial port communication to TCP/IP including terminal services, frame-relay over serial and PPP with authentication.

Network troubleshooting helps administrators maintain their network and keep it up and running for critical services. Capabilities such as protocol monitoring, Syslog and event logs allow system administrators to look for suspicious activity on the network. MNS-INOS can also synchronize timing using SNTP.