NetMAC® Monitor & Control

Total system management

Key Features
- Full Featured, Easy to Use
- Automatic Configuration Management
- User Configurable
- Client/Server Architecture
- Remote Manager Consoles
- User Created Drivers
- Protocol Analyzer
- Fault Masking
- Command Record - Macros
- Action Process – Macros
- Multi-Level Severity Alarms
- Multi-Level Password Protection
- SNMP Agent
- Task Scheduling
- Live / Historical Data Graphing
- Powerful Report Generation

Options
- SNMP Manager
- Email / Pager Notification
- Carrier Monitoring System
- Remote Spectrum Analyzer Display and Command
- Spectrum Card
- Full Redundancy
- Site Diversity Switching
- Uplink Power Control
- WEB Access

System

The NetMAC® (Network Monitor and Control) System is the complete management tool for your telecommunications system, from a single site to a full array of network functions. The NetMAC® provides cost effective and powerful central control of your total operations, giving you the competitive edge.

The NetMAC® has been optimized for the management of communication systems at either a single site or a network having multiple remote locations.

Whether these locations communicate with a single hub, multiple hubs, or exist in a hubless mesh network, the NetMAC® can work within the existing topology and easily expanded to meet your future growth plans.

To fulfill your needs, we have combined flexible hardware configurations in concert with an extensive set of built-in software tools coupled with point-and-click graphics. Customized reporting, automatic task scheduling, and control process programming are just a few of the ways in which you can take charge of your network with NetMAC®.
**Control features**

**User Configurable**

NetMAC® comes equipped with all tools necessary to add new devices, write your own device drivers, and modify and/or add new system screens.

**Automatic Configuration Management**

The NetMAC® file Configuration Management System keeps the worry away on keeping multiple workstations up to date. When a change is made to a screen, bitmap, unit control screen, and/or wav file, it is automatically sent to all other workstations. If a workstation is down at the time, when it comes back up it automatically checks to see if it needs any updates.

**Client/Server Architecture**

The NetMAC® architecture is a unique split OS system utilizing Microsoft Windows OS for the Graphical User Interface and QNX for the data gatherer. QNX provides the real-time environment necessary to respond effectively and efficiently to problems or potential problems in your network. QNX is an extensible POSIX-certified OS with a proven track record for reliability.

**Point and Click Graphical User Interface**

NetMAC® GUI is Object-Oriented in design and utilizes the Windows point and click user interface.

**Multi-Level Password Protection**

The system administrator assigns each users feature level access as well as equipment level access. For added security, the passwords can be hardened; meaning: they must follow a rigid rule set.

**Report Generation**

Capable of generating a variety of different reports, based on types of equipment, time of day, specific event severities, particular users, and more.

**Live Data Graphing / History Reporting**

NetMAC® allows for the gathering of data for detecting intermittent problems and performance analysis. The NetMAC® History function gives you the ability to select and collect raw datapoint values and display these values on-screen live or export the information for use with any other graphic and/or spread sheet application.

**Built-In Test (optional)**

NetMAC® provides automated tests to help maintain the quality of an earth station. They can alert the operator to system changes by monitoring test points and indicators to support function verification, performance analysis, and fault isolation. Typical automated tests include G/T Measurements (star method), Swept Gain, Noise Figure, and Pattern Integration.
Remote Spectrum Analyzer Display and Command (optional)

The NetMAC® allows for display and command of a spectrum analyzer from any operator console.

Carrier Monitoring System (CMS) (optional)

The NetMAC® can monitor any number of carriers for proper C/N ratios, power levels, noise floors, and EIRP.

Spectrum Card (optional)

The SP4801 Spectrum Card, in conjunction with the NetMAC® CMS, allows operators to monitor the TX and RX links and have rapid knowledge of carrier problems without the use of a Spectrum Analyzer.

On-Line Help

NetMAC® provides the O&M Manual as integrated online help. The user can include specific instructions to customize the help for specific operational procedures.

Full Redundancy (optional)

The NetMAC® can provide full “hot redundancy” capability for those mission critical systems. Monitoring and Control operations continue seamlessly upon automatic or manual fail over.

Graphical Driver Interface

NetMAC® provides the ability to write your own custom device drivers.

Protocol Analyzer

NetMAC® comes with the ability to view your message traffic live, and/or store to a file, allowing you to troubleshoot such things as: data errors, protocol problems, timing problems, random problems by the setting of traps, etc.

Uplink Power Control (optional)

NetMAC® provides a cost effective uplink power control solution for one or multiple amplifiers.

Email / Pager Notification (optional)

NetMAC® uses a dedicated modem that can dial a local service provider automatically, make connection, and forward a specific telephone number for reply and/or codes informing the recipient of an out-of-limit condition.
The NetMAC® supports a variety of configurations

- Control Center/Operations Area
  - Single site or Multiple sites
  - Manned or Unmanned
  - Full array of network functions
  - Remote access via laptop

- Shelter/Equipment Room
- Transportables

- Remote

- Device Connections
  - Ethernet Devices
  - Discrete Devices
  - Serial Devices

- Satellite Link
  - Internet
  - Direct Connection