

## MODEL 5073QNX QNX Operating System

### General Description

NovaStar runs under the multi-user, multi-tasking QNX Operating System. This Unix-like operating system provides fast, real-time task scheduling and multi-user support that allows NovaStar to provide its features. QNX is a true multi-threaded operating system that has minimal overhead and maximum reliability for systems that must run 24 hours a day every day of the year. Its small micro-kernel architecture lets it run on personal computers with a high performance unmatched by conventional UNIX systems. Like other UNIX systems, QNX has a login/password security system to limit user access to protected system features.

QNX systems running the NovaStar software act as servers to distribute data and alarm information to as many users as can be connected to the system. The multi-user aspect of QNX lets users connect to the system directly on serial lines or through dial-in modems as well as on the computer console. Each user session runs independently and is protected from other user actions. When a dial-in modem user hangs up the modem line, QNX logs off the user session and requires a new login for the next dial-in user thus maintaining system security.

The QNX operating system was designed to work with LANs. A high speed QNX LAN protocol can connect many QNX workstations over a network for device sharing and data transfer. NovaStar uses this network capability with its LAN failover system. The LAN failover system automatically updates copies of the NovaStar database on two or more computers on the LAN. If the primary system fails, a backup NovaStar system can take over operations with no loss of data.

A license for the QNX operating system is required for each computer running QNX on a LAN. QNX for NovaStar is packaged in two versions: QNX-4 and QNX-4X.

QNX-4 is a 32 bit POSIX compliant system. It supports the latest computer hardware and should be run on a Pentium computer with a large disk and at least 16MB RAM. POSIX is the latest international standard for UNIX-like operating systems. A POSIX compliant source code program can be easily ported to this operating system. Command line programs and command arguments match other POSIX compliant UNIX systems making it easy for UNIX trained operators to use the system. QNX-4 has extremely flexible LAN management that can connect to a variety of networks using standard network cards. For a flood warning system that must connect to an existing network for data distribution, QNX-4 is the correct choice.

QNX-4X is an Xwindow server platform that runs on QNX-4. Xwindows is an industry standard graphic interface (GUI) that works over LANs. The Motif windows manager uses mosaic windows and a point and click style that is intuitive and easy to use. Xwindow terminal users on other computers connected to QNX-4X through a LAN can log into NovaStar and display graphic screens with ease. Choose QNX-4X for an Xwindows compliant system.

Read and write of DOS diskettes for data or file transfer is standard with QNX-4.

QNX can communicate with computers on a LAN running other operating systems (for example DOS or UNIX) with the TCP/IP protocol. This industry standard protocol supports file transfer (ftp), remote shell (rsh), terminal connect (telnet), and mounted disk systems.

### Ordering Information

5073QNX-4 ..... QNX-4 Operating System Software  
5073QNX-4M ..... QNX-4 Operating System Manual  
5073QNX-4TCP ..... QNX-4 TCP/IP Runtime Software  
5073QNX-4X ..... QNX-4X Windows System Software  
5073QNX-4XUP ..... QNX-4 to QNX-4X Software Version Upgrade