

## MODEL 5073NS-EXP Expert System Software

### General Description

The NovaStar Model 5073NS-EXP Expert System Software is a rule based decision making system that evaluates incoming data in real-time an issues commands for additional data storage, controls, alarms, and program execution. Expert system rules are evaluated on regular intervals or when a data report is received for a sensor tested by the rules. A rule set will contain an unlimited number of rules that are evaluated sequentially. Up to 99 rule sets can be run simultaneously by the Expert system.

The Expert system rules use "if-then-else" logic for easy programming. An "if" will test if the first operand is true or false or if two operands are equal, less than, or greater than each other. An operand can be a constant, a sensor's data report value, the result of database statistical analysis, an internal variable, or the time of day. A rule can have several tests with all tests required to be true (ANDing tests) or several tests with just one test required to be true (ORing tests).

After evaluating and "if" test, the THEN action is taken if the result is true, otherwise the ELSE action is taken. Actions can set internal variables for later testing, file data reports in the database, send controls, sound alarms, or execute program commands.

The usefulness of the Expert system is in testing various sensor values in your data collection system to determine the necessary action to take.

### Ordering Information

5073NS-EXP .....Expert System