PC Based Telemetry Software Sitewatch™ 2000

OVERVIEW

Sitewatch 2000 is a high performance telemetry software package which is designed to remotely monitor and control equipment using the Public Switched Telephone Network (PSTN) as the communications medium. The Sitewatch 2000 software runs under Windows 95/98 or Windows NT and Sitewatch Remote Terminal Units (RTUs) provide the physical interface to the telemetry system at the remote equipment sites.

GENERAL

The Sitewatch 2000 telemetry system has been developed over a number of years for use in a wide range of industries and applications for customers around the world. Standardised hardware and software operating on Personal Computers (PCs) provide a cost effective solution for monitoring and control of equipment at remote and widely dispersed sites.

MASTER STATION

The operator interface to the Master Station is via Windows 95/98 or NT. Two software modules run concurrently, one running the Data Acquisition Service (DAS) and the second module running the system administration and data display functions. The DAS module handles all of the communications interface with the RTUs allowing the administration module to be amended whilst the system is 'on-line'. The DAS also has a 'dial-and-hold-open' facility whereby the operator can call up a remote site and keep the line open for a predetermined period of time allowing real-time viewing of the site status. Sitewatch 2000 has an internal facility for analysing the alarm information and logged data. However, as the data is held in an ODBC compliant .mdb file format, it is available for analysis by various packages within the Microsoft suite and indeed any package capable of accessing ODBC compliant files, (Excel, FoxPro, DBase, etc.). A single Sitewatch 2000 Master Station can handle data from in excess of 1000 RTUs and Client-Server architecture enables multiple-user access to the program.

A number of options are available to tailor the Sitewatch 2000 system to meet individual operational requirements. These include: uploading of logged data from the Master Station to other computer systems; an EDI interface for automatic re-ordering of product in a remote storage/tank monitoring application; and relaying alarm calls to standby personnel via remote printers, pagers or our voice messaging system (more details below). Each of these options can be selected to be operational: continuously; or when the Master Station is Manned or Unmanned. Manned Hours are user selectable through the administration program.

REMOTE TERMINAL UNITS

The Sitewatch 2000 software can be used in conjunction with the Sitewatch 16840, Mini or Midi RTUs which provide different combinations of digital and analogue input and output capability. All RTUs are supplied with modems which are approved for use on the telephone network of the country to which they are being supplied. RTUs configured for use with Sitewatch 2000 have several unique features. The RTUs software can be programmed using flash ROM technology over the telephone network. The specific operational details can be programmed by an engineer on site or at the Master station. The system then synchronizes its databases during the next communication between RTU and Master Station. Furthermore, each RTU can be programmed with the telephone numbers of several different Master Stations. Each of these Master Stations can then configure the RTU with its own unique set of Analogue Level Alarm, Analogue Rate of Change Alarm, Digital Change Alarm and Digital Timeout Alarm settings. The RTU can also be programmed by an engineer arriving on site with a Maintenance in Progress timeout alarm for each individual visit.

VOICE MESSAGING SYSTEM

As an option Sitewatch 2000 can be supplied with a voice messaging system which allows alarm conditions to be reported to standby personnel when the Master Station is un-manned. Voice messages describing alarm conditions are recorded by the user and stored on the Master Station hard disc drive. If an alarm condition is reported from the RTU when the Master Station is un-manned Sitewatch 2000 calls the designated standby personnel, reports the alarm condition via the voice message and then awaits a return call to acknowledge the alarm. All transactions are logged at the Master Station.

