

# Consultant

## Refrigeration management Terminal



**A flexible plant management tool, which instantly tells you what you want to know, when you need to know it, wherever you are.**

Supervisory Control & Data Acquisition (SCADA) System facilities within this software package provide operators, managers and engineers with the information necessary to manage and run an efficient industrial or supermarket refrigeration system.

**Simplicity** Simple, intuitive, icon button operation provides animated mimics, system settings, history graphs, alarm facilities, event logs and associated documentation for all refrigeration cases and plant.

**Accuracy** Reliably records accurate measurements of pressure, humidity, temperature, current, kWh energy, case and plant operation for the last year at one minute intervals.

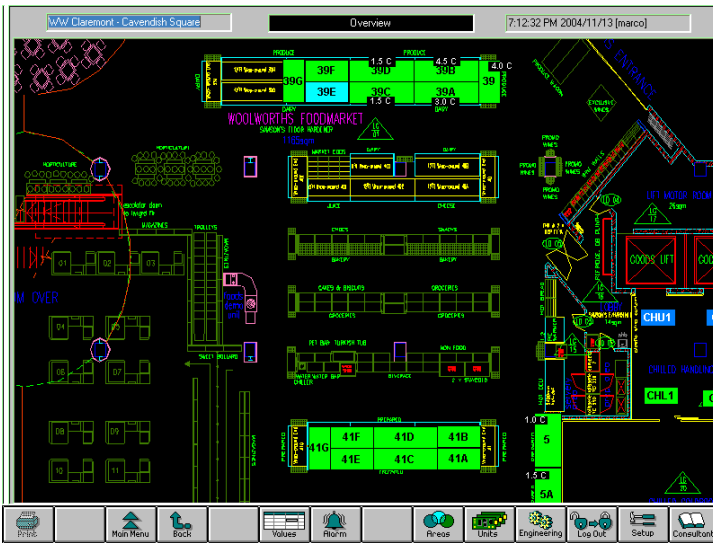
**Flexibility** Windows XP operating system, SNMP networking communications, modular re-programmable control hardware, scalable architecture and application structures anticipate future user facility and communication requirements.

**Accessibility** Local, wide area network or modem access of all management, alarm and graphical information is readily available.

**Integrity** IP networking minimizes communication failures. Guardian controllers are totally autonomous and continue to perform cooling control and defrost without central supervision.

**Compatibility** 'Consultant' systems can be easily retrofitted to sites with existing RS485 controllers. The IPM-3 module and Consultant 'Integrator' provide a conversion facilities for a wide range of RS485 controllers.

**Consultant Screens**



## Overview

'Consultant' is a state of the art graphical PC system for industrial and supermarket Supervisory Control & Alarm Monitoring.

Its ability to support touch-screen, stylus or keyboard and mouse operation combined with a windows interface make it easy to understand and simple to use.

The 'Consultant' system software has been operational for more than 10 years on numerous supermarket and industrial plant system installations throughout the world.

The 'Consultant' system is available as a slim-line, wall mounting touch screen terminal or as a desktop IBM PC with mouse and keyboard.

### Communications

'Consultant' communications and database strategy permits an unlimited number of controllers to be connected to the system. Integration of control and monitoring equipment from many different suppliers and protocols includes WS5 3rd Party, Modbus, TCP/IP, and SNMP.

The 'Consultant' communicates with

- all Internet Protocol controllers using SNMP on the local area network.
- Legacy RS485 controllers via an IPM-3 Internet Protocol Module or Guardian 'Integrator' unit

The IPM-3 provides conversion of RS485 Guardian AGT, WS5 or MODBUS protocol to TCP/IP and SNMP.

The Guardian 'Integrator' unit provides eight RS485 channels which may simultaneously operate with different protocols and baud rates. Each channel can electrically support up to 32 RS485 controllers.

Guardian controllers communicate:-  
'GC' range MODBUS RTU @ 19200 baud.  
'RC' range Guardian AGT @ 9600 baud

### Consultant system facilities include:-

- Continuous monitoring of all controller information.** This includes all measured values, controller settings and configuration data.
- Change system settings** associated with remote control and monitoring units.
- Logging of all system data once every minute.** Data records may be kept for up to one year. Data values may be exported to EXCEL spreadsheets.
- Store Mimics** with animated graphical icons representing the current state of the whole site and up to eight separate areas within it. Mimic backgrounds can be derived using Autocad.
- Unit Mimics** with colour animated icons and displays of the current state of individual items of plant.
- History Graph displays for each unit.** Up to 8 graphs with 8 traces each may be configured to display the performance of each controller. Graphs may be configured retrospectively.
- Alarm detection of out of limit values** associated with evaporators, racks, HVAC plant, gas levels in order to implement the latest food or safety policies of the store group.
- Alarm Events Log** gives display of all alarms that are present or require a user to acknowledge them.
- Alarm Archive Log** for all reset alarms. Flexible search facilities allow patterns of alarm events and frequency of occurrence to be assessed.
- Event Log** of the last 10000 events that have occurred within the system with audit tracing of user actions.
- 'Consultant' button** allows seamless but secure display of EXCEL spreadsheets, HTML, Acrobat.pdf, Autocad.dwg system information and help files.