



PERMALERT

Environmental Specialty Products

Communications Options PAL-AT® and LiquidWatch® Leak Detection Systems PALCOM® 10 Software Product Data



DESCRIPTION

- **PALCOM 10** - completely updated user interface and added SMS and AutoGLS features.
- **Automonitor** up to 254 PAL-AT and LiquidWatch systems
- **Graphic Locator System (GLS)** – Display and print leak location on a site CAD drawing
- **SMS Email and Text Alarm Messages** - Email includes GLS images of fault location.
- **List Archive** – Download and review a list of events from any system
- **Remote Keypad** – View LCD screen and enter keypad for any remote leak detection system
- **Graph Data** – Capture and plot system real time data (TDR traces) from any PAL-AT system
- **Interface Options Available** – RS-232, RS-485, Ethernet and phone modems
- **System Requirements** – Microsoft Windows® Compatible with versions 7, 8, and 10

PALCOM® 10 w/GLS is an interactive remote monitoring software package designed to monitor PAL-AT® cable leak detection systems and LiquidWatch® probe leak detection systems.

PALCOM enables an operator to monitor events on up to 254 systems from one location. PALCOM is supplied with two auxiliary programs, GLSViewer and GraphViewer.

Graphic Locator System (GLS) drawings are displayed with GLSViewer. A GLS drawing shows a leak detection installation. A flashing icon identifies the location of a problem on a sensor cable or probe. This enables an operator to locate the problem quickly without having to locate a hardcopy site reference drawing.

Automonitor continuously checks all leak detection systems and updates the status of the systems 24/7. The status of each system and each cable is displayed.

AutoGLS automatically opens GLSViewer when an event is detected in Automonitor and locates the event on the GLS drawing.

GLSViewer can be displayed on a 2nd monitor, such as in a work area, to be more visible and conspicuous.

SMS email and text messages are sent when an event is detected. Email messages include several images of the GLS drawings which zoom in to the event location. This provides 24/7 notification of leak detection events to any location.

Archives enables an operator to view a list of all archived events, or history, of any system. Messages are displayed as simple text that can be copied and pasted into report documents.

Archives can be sorted by date range, type of message and cable number to aid in diagnosing events.

Remote Keypad enables an operator to view the LCD display information and operate all functions of a system by using the computer keyboard instead of being at the alarm panel.

Graphs feature is only used with PAL-AT systems. PALCOM captures and plots “map” data. The graphs are opened automatically in GraphViewer.

The graphs are TDR (time-domain reflectometry) traces and can be interpreted by trained personnel who are familiar with characteristics of the PAL-AT system.

Interface Options

PALCOM can communicate with PAL-AT and LiquidWatch systems via a network through the computer's Ethernet port, com port, USB port or phone modem. The USB port requires a USB/RS-232 adapter cable.

Each PAL-AT system is supplied with Ethernet, RS-232 and RS-485 ports.

LiquidWatch systems have an RS-232 port and can use an optional Ethernet network modem or RS-485 modem to connect a LiquidWatch alarm panel to a PALCOM computer.

PALCOM Lite is also available to be used on a laptop as a service tool for PAL-AT. It is similar to the standard version but Automonitor has a 3 hour time limit and it does not include the GLS function or GLSViewer.



LIQUIDWATCH MODBUS RTU INTERFACE



TECHNICAL DATA:

- Configured as Modbus slave to communicate with host using Modbus RTU protocol
- Interface LiquidWatch leak detection system with Modbus RTU
- Baud rate and format configurable
- RS-232 output to Modbus host
- Modbus function code 3 operation
- PLC09 Modbus converter and cable to leak detection panel included
- Built-in power-up diagnostics with LED indicator

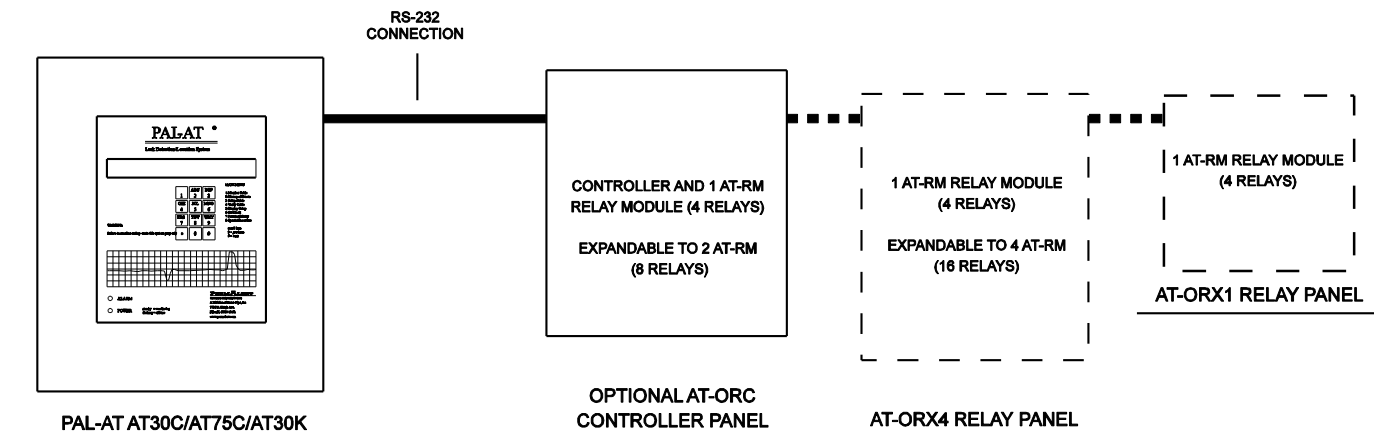
The Modbus RTU Interface connects a LiquidWatch system to a Modbus network, using Modbus RTU protocol. Each PLC09 Modbus converter has battery back-up RAM for configuration data. PAL-AT systems AT30C/AT75C/AT30K have Modbus capability without this option.

Model	Part No.	Description
MODRTUL	8027852	Modbus RTU Interface - LiquidWatch

OUTPUT RELAY SYSTEM

The optional Output Relay system for PAL-AT provides 4 to 60 additional alarm relays. Each relay can be assigned to activate if a leak is detected in a specific section of cable or probe. This provides precise control when a single cable string monitors several pipes or sensitive areas.

Model	Part No.	Description
AT-ORC	8027580	Output Relay Controller
AT-ORX4	8027581	Relay Panel - Expandable
AT-ORX1	8027582	Relay Panel



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