VERBATIM[®]



Interactive Alarm Autodialing • Monitoring • Reporting • Control System

Astec offers the Verbatim by RACO, the long-standing first choice of the industry, providing pace setting functionality and expandability. It's an autodialer alarm system, a remote monitoring, and a supervisory control system, a SCADA system, and a PCL network interface - an all-in-one compact package.

With an expandable, modular bus architecture and up to 32 digital inputs ,16 analog inputs, and 8 digital control outputs, the system can monitor flow level, pressure, temperature, PH, and other types of sensors, as well as remote electrical devices.



ALARM AUTODIALING

The system is designed to continuously monitor preset alarm points. If an alarm condition is sensed at a monitor point, the Verbatim System will automatically dial a list of 16 pre-programmed emergency telephone numbers, calling until it gets an answer. When the call is answered and acknowledged, the system reports the alarm location and status via pre-recorded voice messages.

Communicating over standard landline or wireless telephone networks, the Verbatim delivers alarm messages to standard phones, cell phones, numeric or voice pagers, and voice mail systems, and talks just as easily with computers.



USER-RECORDED MESSAGES

The voice messages are digitally prerecorded by the user. Anything that can be spoken is accurately stored in memory from names and numbers to techincal terms and detailed instructions. Messages are delivered with maximum clarity, lessening the chance for misunderstanding or error. You can easily enter or change your messages over the phone or at the front panel.



FULLY INTERACTIVE SYSTEM

With Verbatim, you're never out of touch with your monitoring system. With any standard touch-tone phone, you can call in for a status report, review and change programming, or control a remote device. With the touch of a key, you can listen to local sounds or talk to personnel using the unit's built-in speakerphone.

When calling for a status report, you can hear a comprehensive summary of all conditions monitored by the system, including internal power. Hard copies of event data-alarms, acknowledgements, inquiries, and programming changes can be printed out at any time using the system's data logging capabilities.

Controls and indicators are provided on the Verbatim's front panel for onsite programming and review of system operation, alarm status, and battery condition.



A Verbatim System can be equipped with up to 8 digital control outputs to remotely actuate HVAC systems, pumps, compressors, and other electrical devices from a standard phone, the Verbatim front panel, or a PC.

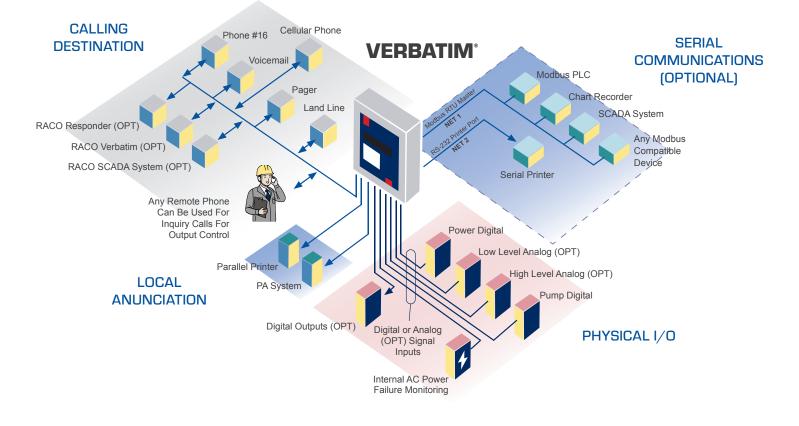




RACO MMI/SCADA Systems provide monitoring and control of up to 200 RACO Verbatim Remote Terminal units (RTUs) over the standard dialup telephone network. Each RTU has full alarm monitoring, reporting, and autodialiing capabilities, and because Verbatim Systems report by execution, they do not need to be polled. When an alarm is sensed, the RTU reports to the central computer. If the computer operator does not acknowledge the alarm, the RTU will start autodialing.



SCAN TO LOCATE YOUR PARTS SALES REPRESENTATIVE





Offering alarm and monitoring for as many as 96 remote channels, the Verbatim can use RS232 communications to work with any PCL or other device using Modicon's Modbus protocol.

TAKE CONTROL OF REMOTE EQUIPMENT

Voice messages are digitally pre-recorded by the user. Anything that can be spoken is accurately stored in memory from names and numbers to technical terms and detailed instructions. Messages are delivered with maximum clarity, lessening the chance for misunderstanding or error. You can easily enter or change your messages over the phone or at the front panel.



Verbatim Systems incorporate non-volatile memory. Recorded alarm messages and user-entered programming is retained indefinately in the event of power loss.

BATTERY BACK UP FOR SAFETY

A rechargedable gel-cell battery provides up to 20 hours of continuous operation in the event of power loss. Because the system uses a precision regulated charger, instead of the traditional "trickle" charger, the time required for charging is minimized and battery life is significantly extended.

BUILT FOR LONG TERM SURVIVAL IN THE TOUGHEST ENVIRONMENTS

Verbatim is designed and built for superior performance year after year. The system's rugged durability is envident in its heavy-duty metal enclosure, carefully selected and proven solid-state components, and seal membrane keyboard. Heavyduty solid-state and gas tube surge protection is provided on all power, phone, and signal lines.



VERBATIM®

SPECIFICATIONS SHEET



ELECTRICAL

- *Power requirement:* 105-135 VAC, 50/60 Hz, 15 watts maximum or 8-14 VDC at 500 mA maximum.
- **Battery charging:** Precision voltage controlled, including automatic rapid recharge after drain.
- Battery backup: 20 hours
- Input sensing: Four unpowered contact inputs standard. Open contacts see volts DC; closed contacts see 10 ma DC.
- Standard Centronics parallel printer port.

PHYSICAL

- Surge protection: Integral gas tube and solid-state protectors on all phone, power, and signal lines. Accomodates field-installed upgrades. Rugged metal indoor enclosure.
- Weight: 8lbs (3.6 kg)
- Dimensions: 11-7/8" H x 9 3/4" W x 5" D.
- *Mounting Centers:* 11 3/8" vertical x 6" horizontal.

ENVIRONMENT

- Temperature range: 20° to 130°F
- *Humidity:* 0-95%, noncondensing

TELEPHONE

- Rotary pulse or tone dialing, keyboard selectable.
- Dials up to 16 different numbers, each up to 60 digits.
- Allows programming of PBX delays in one second increments.
- FCC Registered Part 68, "Ringer Equivalencee": 0.3A.
- Alarm Acknowledgement is by TouchTone key or by calling back.
- Built-in speaker phone allows two-way conversation.
- Compatible with most cellular telephone systems.

UL STANDARD

• Verbatum complies with UL Standards: 1459, 1950.

SPEECH MESSAGES

 Users record their own messages. Also includes resident vocabulary for programming guidance and for default "alarm/normal" speech if no user messages are recorded.

MODULAR OPTIONS

- Channels: Upgradeable to 8, 16, 24 or 32 channels.
- **Analog:** Custom scaled in the units of measurement required for your job. Analog alarms on a high and a low alarm setpoint. Upgradeable to 1, 4, 8, or 18 analog channels.
- **Remote Supervisory Control:** The operator can turn equipment on or opff via any telephone. Upgradable to 4 or 8 outputs.
- *Modbus Interface:* In addition, to physical inputs, the unit is upgradeable to 32, 64, or 96 additional alarms of any type via RS232 and Modbus RTU master protocol.
- Cellular Telephone: Our Cellularm System provides
 temporary or permanent alarm autodialing over the cellular
 telephone network when conventional telephone lines are
 disabled or unavailable. Furnished in a rugged, weather resistant housing that's easy to transport and set up.

FACTORY OPTIONS

- Enclosure: System available in NEMA 4x ensclosure, which is corrosion proof and seal against 12 feet of water.
- **Environment:** Thermostatically controlled heater available, suggested for operation below 20°F or where condensation may occur.
- Local Alarm Relay Output: Relay activates during unacklowledged alarm conditions.
- Secure Front Panel: Verbatim System furnished without front panel programming controls indicators. Restricts access to unsupervised or remotely located units, as well as reducing the initial purchase price.
- Solar Electric Generator Systems: Ideal for remote location applications where conventional power and telephone services are not available. Provides steady, clean power and has sufficient storage capacity for overcast and inclement weather conditions.