Catalyst



A new era in data communications

...Introducing the world's first integrated, interactive data logging and alarm notification system

Finally...one flexible system is all you need for all your data and event logging, alarm notification, and status checking needs. RACO's Catalyst® Interactive Communications

System provides an up-to-the-minute, two-way connection with your critical data—whether through traditional phone, pager, cell phone, e-mail, or fax channels.



Data Logging with Immediate Access

Now you can perform data logging and get an immediate report—without going to the site.

RACO's Catalyst monitors up to 256 points to provide extensive data and event logging capabilities. Featuring up to five megabytes of on-board memory, the system can monitor data samples, alarms, channel state changes, and configuration changes.

CALLING DESTINATION TYPES

At any time, you can obtain the status of level and temperature indicators, flow meters, switches, annunciator panels, motors, pumps, compressors, PLCs, SCADA systems, and other devices.

Constant Communication Using Any Source

Download a status report today...be alerted of alarm conditions...change a parameter...any time, using virtually any communications source.

With Catalyst, you're always in touch—via phone, fax, e-mail, voice mail, pager, or cellular networks. For general or keyword-selectable information, contact Catalyst. One of your pumps is down? Catalyst contacts up to 96 user destinations, communicating the alarm location and status in a voice message. Or Catalyst can report the condition to a central computer.

Collection Types

STATE LOGGING

CHANNEL DATA SAMPLES
 ALARM LOGGING

NUMBER OF SAMPLES: 740.000

NUMBER OF CHANNELS: UP TO 256

SYSTEM

OVERVIEW

ALPHANUMERIC

Versatile Inputs and Interfaces

Catalyst features 4 standard internal inputs that are easily configured to sense digital or analog signals, and 56 remote channel inputs that are expandable to 256.

The system interfaces with any PLC, or with any other device using Modicon's Modbus protocol, using only RS232 communications.

Easy Programming and Upgradeability

remove the unit from service.

UNIVERSAL

Catalyst is easily programmed even from remote locations—with a free download of RACO Alarmware®. This software allows users to quickly set up all monitoring, reporting, and control functions. A PIN-based security system safeguards all settings. Upgrades SERIAL are simply downloaded and may be accessed from the Internet, so you can get the most current functionality and features without ever having to

Standard Features

Total Channels: up to 256 points monitored including channels interfaced via Modbus, and four internal universal (analog/digital) inputs

Protocols: Modbus RTU protocol built-in. Interfaces to PLCs, Distributed I/O, DCSs, etc.

User Memory: up to 5 MB of memory for user speech and data log file

Internal Log File: collects periodically sampled channel data, alarms, state and configuration changes. Log file transfers to faxes, data collection stations, and RACO Alarmware®

Dialouts: calls up to 96 different destinations

Destination Types: traditional voice phone, numeric and alphanumeric pagers, faxes, e-mail, data log collection stations, RACO Central Station, and PA Systems

Channel Grouping: may assign channels to different destination groups for responsible personnel targeted calling

Voice Messages: up to 45 minutes of voice messages

Configuring: programmed via front panel, remote telephone or Alarmware Software

RACO Alarmware Software: locally or remotely configures units, collects log files and maintains configurations for multiple units

Firmware Upgrades: use Alarmware to upgrade unit without changing hardware or returning unit to factory

Battery Backup: 10 hours **Warranty:** five years

Standard Specifications IO/SENSING

4 physical universal inputs Monitors 56, 96, or 256 Modbus addresses

DATA LOGGING

Frequency Interval: 10 sec-24hr Number of samples: up to 740,000 Number of channels: up to 256

TELEPHONE

Dialing Methods: selectable Touch-Tone or pulse dialing

Total Destinations: up to 96 different numbers; each up to 255 digits long

Destination Types: traditional voice phone, numeric and alphanumeric pagers, faxes, e-mail, data log collection stations, RACO Central Station, and PA Systems

Alarm Acknowledgement: Touch-Tone key, by calling back, or Alarmware

Speakerphone: built-in for two-way on-site calling

PBX Delays: programmable in increments of 1 second

Compatibility: compatible with most cellular telephone systems

FCC Registration: Part 68, "Ringer Equivalence": 0.3A

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.

PROTOCOLS

Modus RTU Master

CONNECTIVITY

Modbus port: RS232 9 pin D Sub male RS485 9 pin D Sub male

Alarmware Programming port: RS232C 9 pin D Sub male

Serial Printer port: RJ45 modular connector

ELECTRICAL

Universal Input Sensing:

Digital: unpowered contact inputs, open contacts see 5 volts DC; closed see 10mA DC Analog: 4-20mA current loop, scalable in engineering units, resolution: 0.1%, accuracy: 10 bits

Power requirements: 105-135 VAC, 50/60 Hz, 15 watts maximum or 8-14 VDC at 500mA maximum

Power Consumption: standby 420mA, active 450mA

Battery Backup: 10 hours

Battery Charging: precision voltage controlled, including automatic rapid recharge after drain

Surge Protection: integral gas tube and solid-state protectors on all phone, power, and signal lines

PHYSICAL

Rugged metal indoor enclosure: Weight: 8 lbs. (3.6 kg)

Dimensions: 11-7/8" H x 9" W x 5" D Mounting Centers: 11-3/8" vertical x 6" horizontal

ENVIRONMENTAL

Temperature Range: 20° to 130°F Humidity: 0 to 95%, non-condensing

UL STANDARD

Catalyst complies with UL Standards: 1459, 1950

WARRANTY

Five-year parts and labor warranty. See our separate warranty card for details.

Accessories

4 MB Memory: 4 MB Memory upgrade for the following models: C10-S-020-1450 and C1S-S-020-1450

NEMA 4X Enclosure: fiberglass NEMA 4X enclosure, water tight/dust tight with locking hasp

Serial Printer Cable: 6' Catalyst to serial printer cable

Modbus Cable: 6' Catalyst to Modbus cable

Alarmware Cable: 6' Catalyst to computer cable

Cellularm: Cellularm cellular telephone communications system for the Catalyst. Includes cellular telephone, 12 hour standby battery, "Rubber Ducky" antenna, and a NEMA 4X enclosure that houses all the above components

Power Supply: UL approved, CSA/UL approved

Environmental: heater with thermostat control

Catalyst® Models

C10-S-020-1450

Monitors 56 total channels including 4 internal digital/analog inputs, 1 MB memory, 120 VAC power source

C10-1-020-1450

Monitors 96 total channels including 4 internal digital/analog inputs, 5 MB memory, 120 VAC power source

C10-2-020-1450

Monitors 256 total channels including 4 internal digital/analog inputs, 5 MB memory, 120 VAC power source

For ordering information, call toll free at...800-722-6999.





REMOTE ALARMS AND CONTROLS

1400-62nd Street, Emeryville, CA 94608 Phone: (510) 658-6713 • 1-800-722-6999

Fax: (510) 658-3153 E-mail: sales@racoman.com Web site: www.racoman.com