

Alarm Scanner Offers 16-Channels of Alarm Monitoring and Data Acquisition



Watlow's CAS200 (Compact Alarm Scanner) provides 16-channels of alarm monitoring and data acquisition for a broad range of applications and processes. Its compact ½ DIN size, advanced features and superior performance make it ideal for industrial and laboratory applications that require reliable alarm monitoring and data analysis.

The CAS200 comes standard with the CAS200 edition of WATVIEW, Windows® software that provides on line set up, alarm notification, recipe management, trend graphing and spreadsheet importable report data. The CAS200 supports the Modbus® RTU protocol making it compatible with virtually all automation and data acquisition software.

The CAS200 adds independent data acquisition and alarm monitoring to your process. It can measure up to 16 inputs. Sensor data is transferred to a computer or programmable logic controller (PLC) through a standard RS-232 or RS-485 port.

The CAS200 is UL® and C-UL® listed and meets the requirements of the European Community's EMC directive and bares the CE mark.

UL® and C-UL® are registered trademarks of Underwriter's Laboratories, Inc. Windows® is a registered trademark of Microsoft Corporation. Modbus® is a trademark of AEG Schneider Automation.

Features and Benefits

Multiple and mixed inputs

- Accepts any combination of thermocouples, linear dc voltage or linear dc current sensors
- Reduces learning curve and inventory

Menu-guided operation with full text display

- Allows quick setup of the scanner
- Simplifies operation
- Includes pass-sequence-protected supervisory menus

EIA/TIA-232 and 485 Communications

- Connects to software for easy configuration and operation
- Allows integration with controllers and software

Process display in engineering units

- Shows the process in units preferred by operators

Remote alarm acknowledge

- Acknowledges alarms with an external contact or push button

Process variable scanning and display

- Displays one channel; or scans and displays each channel
- Continuously monitors critical process variables

34 user-configurable alarm outputs

- Integrates with other process automation equipment

Versatile alarms

- Allows independent high and low process alarms and deviation band alarms

Job storage and recall

- Stores up to eight sets of alarm settings
- Allows job selection via keypad or digital inputs

 **WATLOW**
Better Thermal Solutions...Faster

ISO 9001



Registered Company
Winona, Minnesota USA

WIN-CAS-0807

WATVIEW Software

Use WATVIEW to set up and monitor CAS200 scanners. Connect one or more CAS200 scanners to a Windows® computer. WATVIEW-CAS provides trend plot graphing, setup screens, data logging, recipe manager, spreadsheet data editor, system activity log and alarm manager.

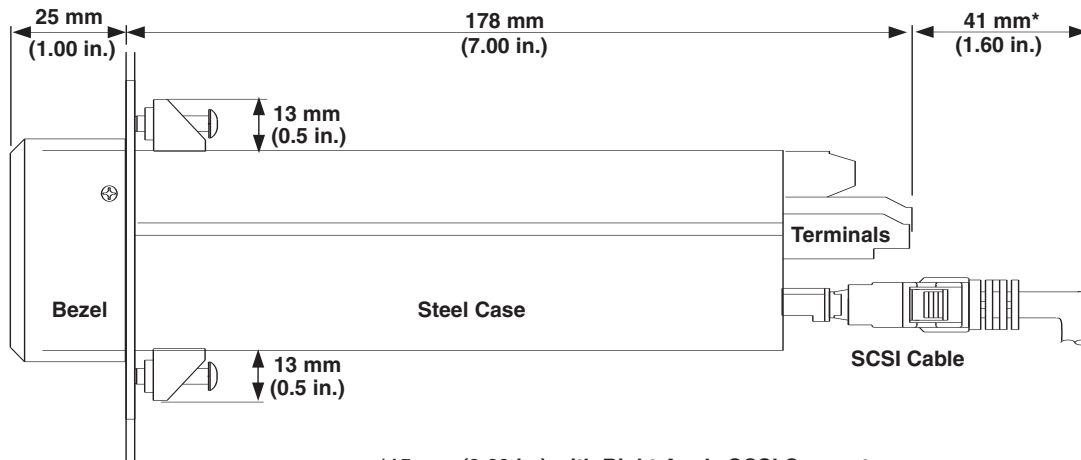
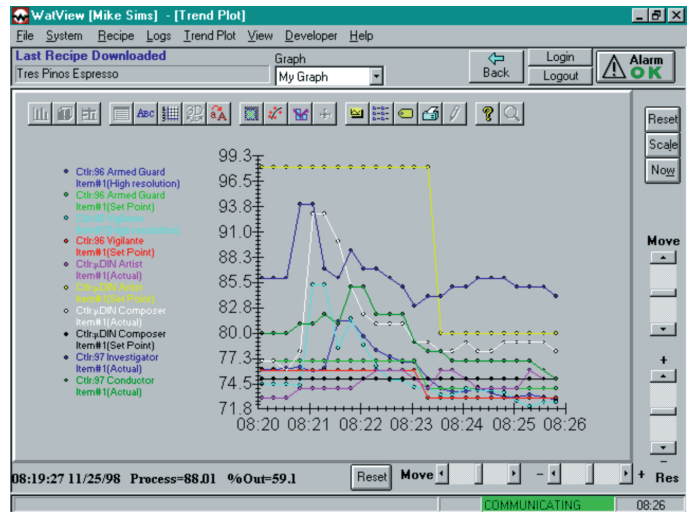
Easy Scanner Setup

Use WATVIEW to automatically detect the scanners that are connected, then configure itself automatically. Use built-in setup screens to adjust the parameters in the CAS200 scanners, or the simple "spreadsheet view" for a quick, intuitive interface.

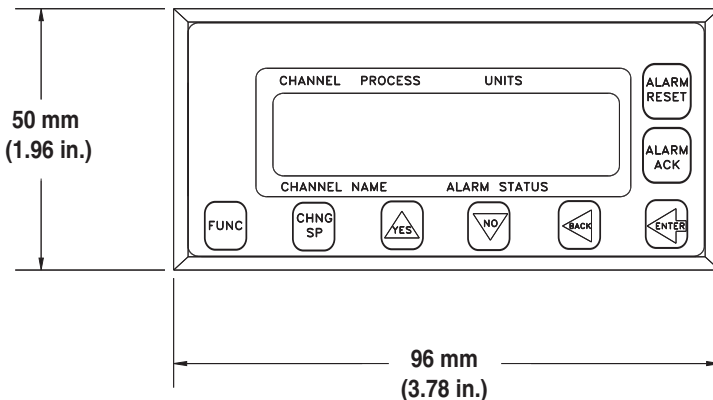
Data Logging and Trend Plot Graphs

WATVIEW includes continuous data logging of the parameters you choose. You can export the collected data to an Excel®-compatible spreadsheet file, or view the data on a WATVIEW trend plot graph. Up to 14 items may be plotted at once on a trend plot graph. An unlimited number of graphs may be stored and named for easy future retrieval.

WATVIEW includes full support for the CAS200 compact alarm scanner. The CAS200 is also compatible with the full WATVIEW HMI package with which it can be integrated with many Watlow controllers, including the SERIES 96, SERIES 97, MICRODIN™, SERIES CLS200, SERIES MLS300, SERIES F4 and SERIES SD.



*15 mm (0.60 in.) with Right Angle SCSI Connector



CAS200 Specifications

Operator Interface

- 32-character vacuum fluorescent display
- 8-key keypad to access guided menus and prompts, enter passkey sequence, set values, switch between single channel and multiple channel displays
- Controller configuration can be loaded through the standard serial port

Analog Inputs

- 16 single-ended

Noise Rejection

- 120dB at 60Hz

Temperature Coefficient

- 40ppm/°C

Sensors/Inputs

- Thermocouples: user-selectable type, direct connection, linearization, reference junction compensation, and upscale break protection
- Linear: current and voltage signals from linear transmitters
- Pulse input

Input Range and Accuracy

Sensor	Range (°C)	Range (°F)	Accuracy
Type B	66 to 1760°C	150 to 3200°F	±4.0°C
Type E	-200 to 787°C	-328 to 1448°F	±1.0°C
Type J	-212 to 760°C	-350 to 1400°F	±1.2°C
Type K	-268 to 1371°C	-450 to 2500°F	±1.3°C
Type N	-268 to 1299°C	-450 to 2370°F	±1.5°C
Type PL-II	10 to 1100°C	50 to 2012°F	±1.0°C
Type R	-18 to 1766°C	0 to 3210°F	±2.8°C
Type S	-18 to 1760°C	0 to 3200°F	±2.8°C
Type T	-268 to 399°C	-450 to 750°F	±1.6°C

Note: Accuracy @ 25°C (77°F) ambient. Valid for 10 to 100 percent of span except Type B, which is specified for 427 to 1760°C (800 to 3200°F).

Linear Voltage and Current Inputs

Requires scaling resistors. See Special Inputs in ordering Information.

- 0-10mA_{rms}(dc)
- 0-20mA_{rms}(dc)/4-20mA_{rms}(dc)
- 0-100mV_{rms}(dc)
- 0-500mV_{rms}(dc)
- 0-1V_{rms}(dc)
- 0-5V_{rms}(dc)
- 0-10V_{rms}(dc)
- 0-12V_{rms}(dc)

Other ranges available. Consult factory.

Pulse Input

- 1 TTL-level square wave input up to 2kHz

Input Sampling Rate at 60Hz

- 24 channels per second
- 1.5 samples per second, (update time: 0.667 sec.)

Calibration

- Automatic zero and full scale

Digital Inputs

- TTL-level used for remote alarm acknowledge and selecting recipes or jobs
- 8 inputs and one pulse input with 50-pin terminal board option
- 2 inputs and pulse input or 3 inputs with 18-pin terminal block option

Alarm Outputs

- 34 user-configurable, digital outputs are available with the 50-pin terminal board option
- 11 user-configurable, digital outputs are available with the 18-pin terminal block option
- Any alarm can be assigned to any available digital output. These include: process alarms and deviation alarms
- Global alarm: digital output for any alarm. Output is cleared with front panel alarm acknowledge or remotely through the serial interface.
- Watchdog output: on when scanner is functioning correctly
- Outputs sink up to 60mA each at 5V_{rms}(dc)
- 350mA at 5V_{rms}(dc) available from onboard supply

Serial Interface

- EIA/TIA-232 or EIA/TIA-485

Baud Rate

- 2400, 9600 or 19200, user-selectable

Communications Protocols

- Form of ANSI X3.28-1976, (D1, F1) compatible with Allen-Bradley PLC/2
- Modbus[®] RTU

Line Voltage/Power

- 15-24V_{rms}(dc) ±3V_{rms}(dc) @ 1A (maximum), 300mA (no load)

Agency Approvals

- UL[®], C-UL[®] listed: UL[®] 61010-1 safety requirements for measurement, control and laboratory equipment
- CE Mark: See Declaration of Conformity for details

Ordering Information

SERIES CAS200

Code Number 200 -

Terminal Board

- 0 = SCSI connector only, user supplies cable and terminal board
- 1 = 18-pin terminal block mounted on unit, no SCSI cable required
- 2 = 50-pin terminal board (3 foot SCSI cable included)

Power Supply

- 0 = No power supply
- 3 = 120/240V~(ac), 50/60Hz power supply adapter (15V= [dc] @ 1.2A) (CE, UL® Class 2 approved)

SCSI Cables

- 0 = 3 foot SCSI cable with terminal board option 2 (no cable with options 0 or 1)
- 1 = 6 foot SCSI cable
- 2 = 3 foot right angle SCSI cable
- 3 = 6 foot right angle SCSI cable

Serial Communication Cables

(For communications with computer)

- 0 = 4 foot serial communications cable (DB-9 female/bare wire)
- 1 = 10 foot serial communications cable (DB-9 female/bare wire)
- 2 = 25 foot serial communications cable (DB-9 female/bare wire)
- 3 = 50 foot serial communications cable (DB-9 female/bare wire)

Scanner Software

- 1 = CAS200 edition of WATVIEW Windows®-based software with parallel port key
- 3 = CAS200 edition of WATVIEW Windows®-based software with USB key

Serial Communications Jumper Settings

- 0 = EIA/TIA-232
- 1 = EIA/TIA-485
- 2 = EIA/TIA-485 terminated

Special Inputs

(Standard unit is configured for thermocouples and -10 to 60mV linear inputs. For other sensors, order special inputs.)

- 00 = Thermocouples and -10 to 60mV inputs only
- XX = Number of current or voltage inputs, Include leading zero as needed.

C A S S I - -

Special Input Type

(Not required for thermocouple sensor inputs)

- 43 = 0-10mA= (dc)
- 44 = 0-20mA= (dc)/4-20mA= (dc)
- 50 = 0-100mV= (dc)
- 52 = 0-500mV= (dc)
- 53 = 0-1V= (dc)
- 55 = 0-5V= (dc)
- 56 = 0-10V= (dc)
- 57 = 0-12V= (dc)

Start Channel

XX = Channel Number XX

End Channel

XX = Channel Number XX

Availability

Up to four weeks, depending on complexity and order release quantity. Consult factory for details.

Your Authorized Watlow Distributor Is:

To be automatically connected to the nearest North American Technical and Sales Office call:

1-800-WATLOW2

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