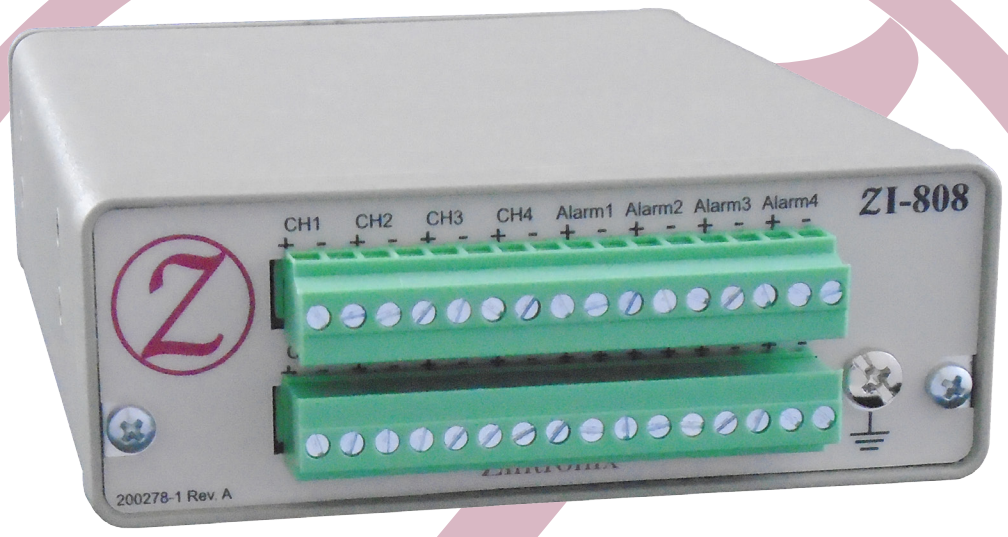
Zintronix

Technology for Combustion

ZI-808

Web-based Data Logger



- No software to install
- Intelligent data logger with built-in web server works with any device using a modern web browser
- Stores data locally to internal flash memory or a USB thumb drive and/or remotely to any accessible server or email address
- Allows remote real time display and configuration
- Eight differential and isolated analog input channels programmable as voltage or thermocouple measurement per channel
- Four pulse input channels programmable as count, frequency, or discrete function per channel
- Four real-time discrete alarm output channels with email/text notification
- Automatic time and date stamping
- Flexible triggering selections star and stop data recording based upon:
  - Analog and pulse input levels
  - Alarm status
  - Date/time/day-of-week
- 20 programmable sampling intervals ranging from 25 mS to 1 hour
- Built-in Ethernet interface

ZI-808 Description

Web-based, Device-independent Operation

Model ZI-808 is a giant step forward in the evolution of data logger technology toward autonomous and device-independent operation. Its built-in web server allows you to access, configure, manage, and oversee in real time all aspects of the instrument's measurement process using any device with a web browser running under any operating system. Just as you can navigate to Yahoo! using your favorite smart device, that same device can be used without exception with the ZI-808. And because intelligence is built into the instrument, third party cloud services with their associated security risks and fee-based structures are avoided entirely. You stay in control at all levels, from device configuration and real time monitoring, to the acquired data and alarms the ZI-808 places on your smart device. The ZI-808's Ethernet interface allows it to integrate with any existing local area network (LAN) or virtual private network (VPN.) And simple port forwarding exposes the instrument to the Internet, allowing remote access from any location on the planet.

Measurement Flexibility

Built around the ZI-808's web server is a powerful data logger engine that adapts to a wide range of analog and pulse measurements. Eight analog input channels feature channel-independent voltage and thermocouple configurations. Voltage measurements support ±10 mV to ±50 V measurements across twelve programmable ranges. Thermocouple configurations support J,K,T,B,R,S,E, and N types. Full channel isolation allows virtually any measurement in tough industrial environments: grounded thermocouples, powered thermocouples, off-ground current shunts, as well as unexpected and unknown ground potential differences. Complementing the analog input channels are four pulse inputs. Each can be independently programmed for simple state detection, to operate as a counter, or make a frequency measurement. Use these functions to acquire, for example, volume data from a flow sensor (count), and flow rate (frequency.) Other examples are rpm measurements or simple counting in production or product life test applications. Both analog and pulse measurements are reported synchronously in the same sampling interval, and all measurements are time-and-date-stamped. Sampling intervals are programmable as often as once every 25 mS or as infrequently as once every hour, with 18 selectable intervals in between. There's even an external option to synchronize sampling to external events.

Alarm Outputs with E-mail/Text Alerts

The ZI-808 also provides four alarm output channels that can be used to flag exceptions during a recording. Each discrete output can be used to signal a PLC, turn on an alarm, or otherwise used as demanded by the application. Each alarm output is also linked to the web interface, where an email alert (or text alert, if supported by your provider) can be triggered when the alarm activates.

So, even though you may be miles from the instrument, you're only a few swipes on your smart device away from real time process updates.

Triggering Flexibility Adapts the ZI-808 To Your Needs

The ZI-808 supports exceptional triggering flexibility to determine when the data logger should start and stop recording data, and when alarms should be activated. All or any subset of analog and pulse input channels can be tested, and conditions that stop and start recording can be entirely different. The start and stop recording processes can be a function of input levels, an alarm state, a specific date and time and day-of-the-week. Level tests support single and dual modes. Single levels support above- and below-threshold tests. Dual levels test inside or outside a trigger window. All enabled trigger conditions per analog or digital input can be combined in a selectable Boolean AND/OR function to further refine trigger definitions. So, if you want to begin recording when channel 2 exceeds 34 psi AND when channel 5 is greater than 84 but less than 127 pounds, and then stop recording at 10 pm on Sunday evening, you can do it. You can even configure the instrument to re-trigger itself automatically. Finally, when the ZI-808 completes a start/stop recording cycle it can be configured to send data to one or all of five destinations ranging from local to remote servers, multiple email addresses, and even a USB drive with built-in flash memory (4GB standard, 32GB optionally) providing transparent backup.

ZI-808 Major Features and Benefits

Built-in Web Server

Use the ZI-808 where and when you choose, from any casual or professional setting, and from any portable, handheld, or desktop device. The instrument's JavaScript-based GUI is purely portable across platforms, and its Responsive Design works with either large- or small-screen devices. All you need is a web browser (Chrome, Safari, Firefox, Edge, etc.) to configure, monitor, and receive data from recording sessions.

Eight Analog Input Channels

Measure as many as eight analog system variables at once.

16-bit Analog Resolution Measurements

Resolve even the smallest changes in applied voltage and temperature (see specifications for details).

Programmable Voltage Ranges

Each ZI-808 channel may be programmed for one of the following ranges: ±10, 25, 50, 100, 250, 500 mV; ±1, 2.5, 5, 10, 25, 50 V.

Flexible Triggers To Start and Stop Recording

Start or stop recording based upon alarm state, or analog and pulse channel thresholds that are above/below a level, or inside/outside a window. Date/time/daily triggers are also supported.

Selectable Thermocouple Types per Channel

The ZI-808 supports direct-connected J, K, T, B, R, S, E, and N thermocouples without the need for external signal conditioning.

Flexible Alarm Detection

Discrete alarm outputs with email/text notifications can trigger above or below a level, or inside or outside a window as tested on any combination of analog and pulse channels.

Isolated and Differential Analog Inputs

Noise-free measurements in virtually any application setting.

Protected Inputs

Analog and pulse inputs are protected to prevent mishaps from causing damage to the instrument. Analog inputs to ±170 V and digital to +30 V.

Place Data Anywhere

The ZI-808 can be configured to store data to local or remote FTP/SFTP file servers, a local server, USB drive, or a range of email addresses. Redundancy is built in, since the ZI-808 automatically backs up recorded data to its internal flash memory.

Four Pulse Input Channels

Record true/false conditions, counts (up to 2^{32}), and frequency (up to 500 kHz) per input. Perfect for rpm, flow, and volume, gas/water/energy measurements.

Built-in CJC

Cold junction compensation is automatically enabled for any channel programmed as a thermocouple input.

Wide Sampling Interval Range

Allows one sample per 25 mS to one sample per hour with eighteen intermediate settings. Supports external sampling as well.

Supports both User and Administrator Accounts

Allows ZI-808 users to be segregated between those who can make measurement adjustments (Administrator) and those who can only view configurations and acquired data (User). Access for both are protected with user name and passwords.

Programmable Filter Per Analog Channel

Each analog input channel may apply a moving average filter using selectable factors to reduce noise.

EU Scaling per Analog and Digital Channel

Apply scales and offsets because you usually don't acquire data in Volts or milliVolts, but rather physical units like pounds, gallons, amps, psi, kiloPascals, etc.

Flexible Power Supply Requirements

The ZI-808 is provided with a supplied multi-country ac to 12 V dc power supply, or it can be powered from a 9-36 V dc source.

Excitation Power Supply Output

The ZI-808 provides a 15 V dc, 2-Watt dc power source for powering external sensors.

Automatic Time and Date Stamping

All data acquired by the ZI-808 are time and date stamped so you can easily correlate recorded measurements with the precise moment they occurred.

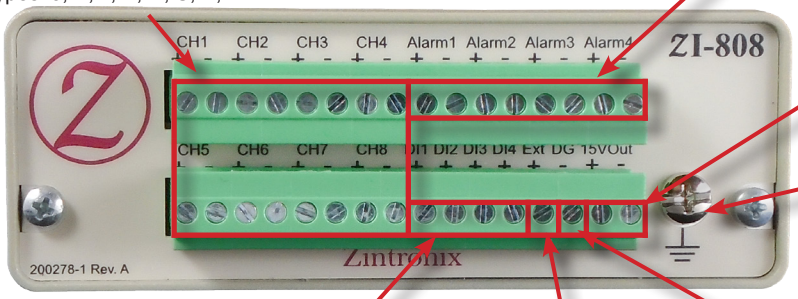
View Data File While Recording

ZI-808 uses CSV file format. You can view the CSV whilst recording.

ZI-808 Close-up

Front Panel

Analog In Channels 1-8
(programmable Voltage or Thermocouple)
Voltage Ranges: ±10, 25, 50, 100, 200, 500 mV; ±1, 2.5, 5, 10, 25, 50 V; Thermocouple Types: J, K, T, B, R, S, E, N



Four Discrete Alarm Outputs

15V Out
15 V dc, 2-Watt dc power source for powering external sensors, like the optional HMP60 ambient temperature and RH sensor

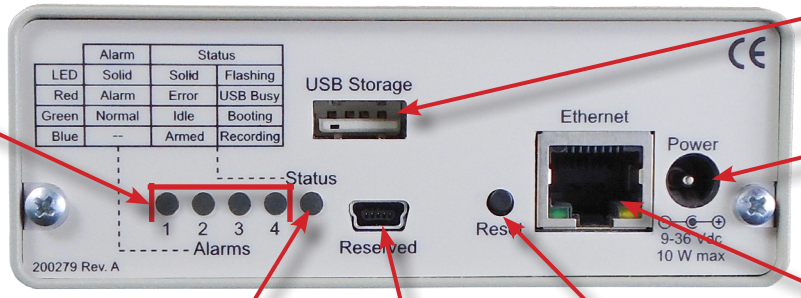
Ground Lug

Digital In Channels 1-4
Programmable as discrete, count, or frequency

Digital In EXT
Use as an external sample or trigger

Digital Ground

Rear Panel



Alarm LEDs
(Alarm Channels 1-4)
Red = Alarm
Green = Normal
Off = Disabled

USB Storage
Use any USB drive for data storage or configuration upload

Power
Power with the provided AC adaptor, or from any 9-36 VDC source

Status LED

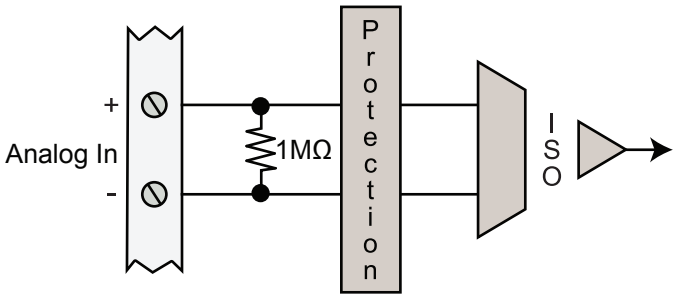
Mini-B USB
Reserved

Reset Button

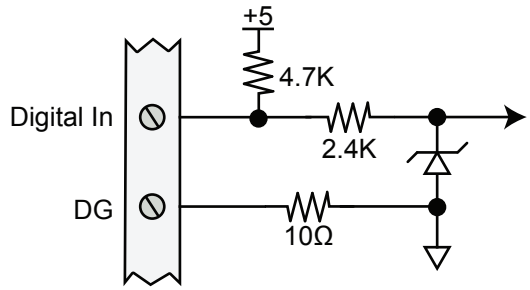
Ethernet Port
Connect to any network or computer with a CAT5 cable to access the device

ZI-808 I/O Equivalent Circuits

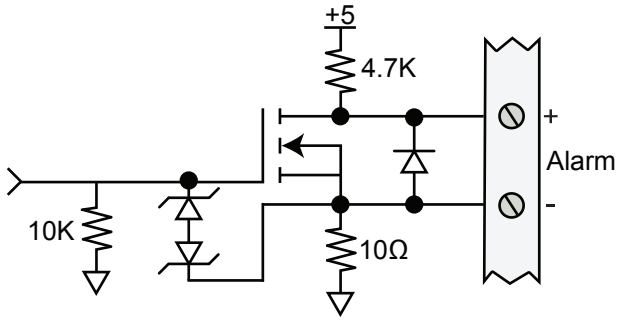
Analog Input



Pulse Input

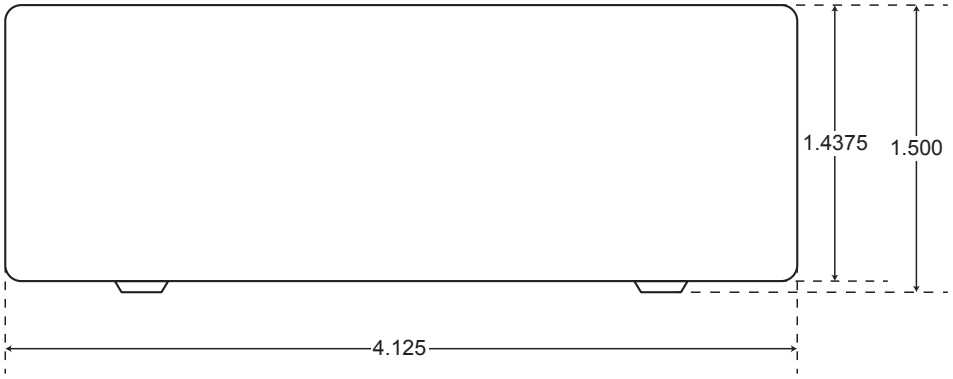


Alarm Out

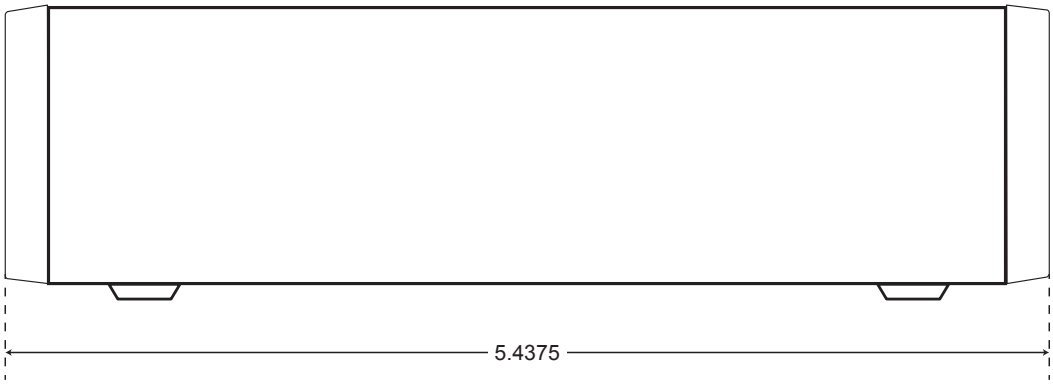


ZI-808 Dimensional Drawing

Front/Back



Side



Dimensions shown in inches

Eight Analog Input Channels

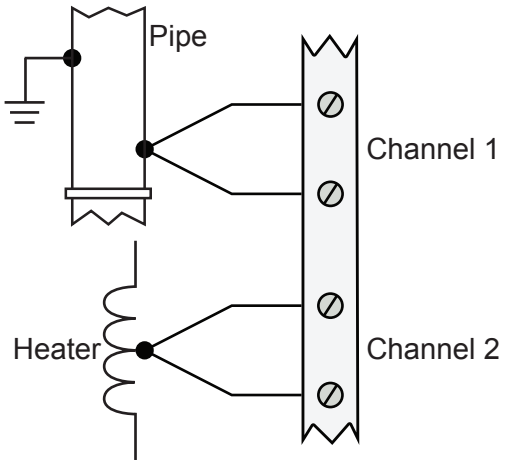
Each of the ZI-808's eight analog input channels is fully programmable for measurement function, range, and other attributes. Input-to-output and channel-to-channel isolation allow noise-tolerant measurements in the presence of the common mode voltages that are almost always present in industrial environments.

<table>
<tr><th>Functions</th><th>Ranges</th><th>MA Filter</th><th>Label</th><th>Engineering Unit Scaling with EU Tag</th></tr>
<tr><td>Voltage</td><td>±10, 25, 50, 100, 250, 500 mV
±1, 2.5, 5, 10, 25, 50 V</td><td rowspan="3">Off, 2, 4, 8, 16, 32 samples</td><td rowspan="3">32-character channel annotation</td><td>m and b scaling constants calculated by the instrument from user-supplied data:
<table><tr><th></th><th>Volts</th><th>EU</th></tr><tr><td>Upper:</td><td>*</td><td>*</td></tr><tr><td>Lower:</td><td>*</td><td>*</td></tr><tr><td>Units tag:</td><td>*</td><td>*</td></tr></table>*user-supplied data. Instrument calculates m & b</td></tr>
<tr><td>Process current (4-20 mA)</td><td>5 V range using 250 Ω shunt resistor model R250:
1 V = 4 mA
5 V = 20 mA</td><td></td></tr>
<tr><td>Temperature</td><td>J, K, T, B, R, S, E, N type thermocouple</td><td>°F or °C selected on the device level</td></tr>
</table>

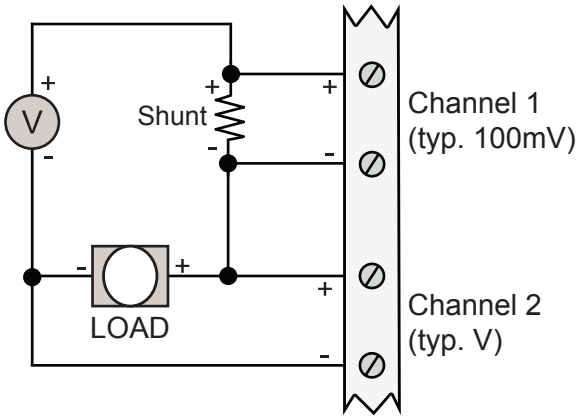
Typical Analog Channel Connections

The isolation, range, and multi-function nature of the eight ZI-808 analog input channels allows a wide range of measurement possibilities. Here are just a few:

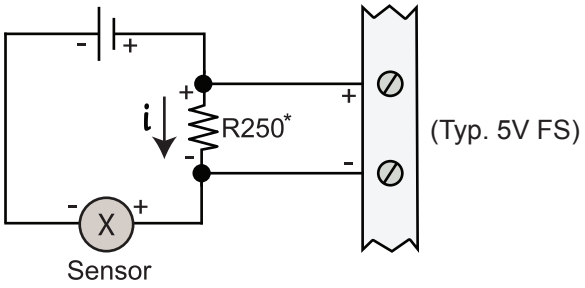
Grounded or Powered Thermocouples



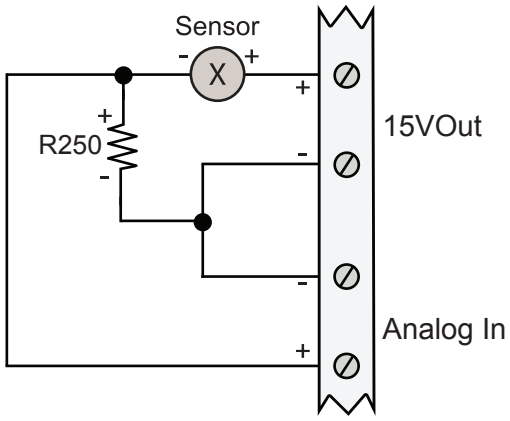
Simultaneous Voltage and Current



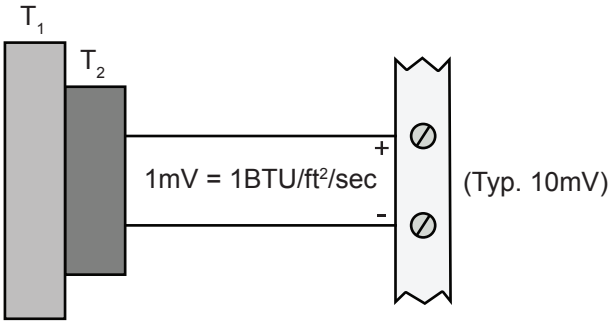
4-20 mA Process Current (externally-powered)



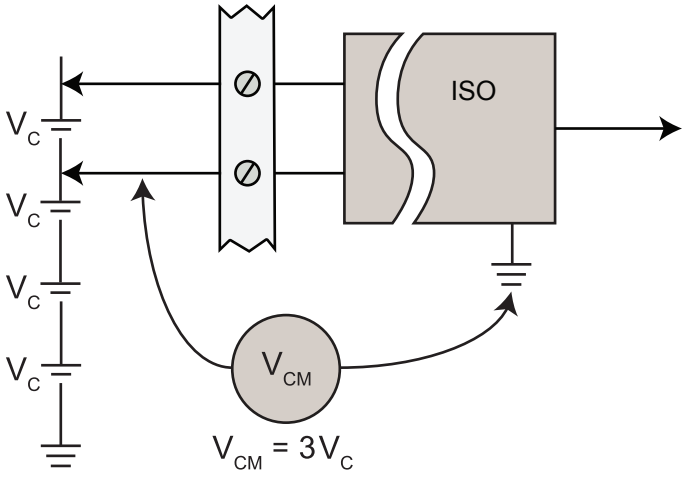
4-20 mA Process Current (powered by ZI-808)



Heat Flux Sensor



Stacked Power Cells



* Optional model R250 250 Ω process current shunt resistor

Four Pulse Input Channels

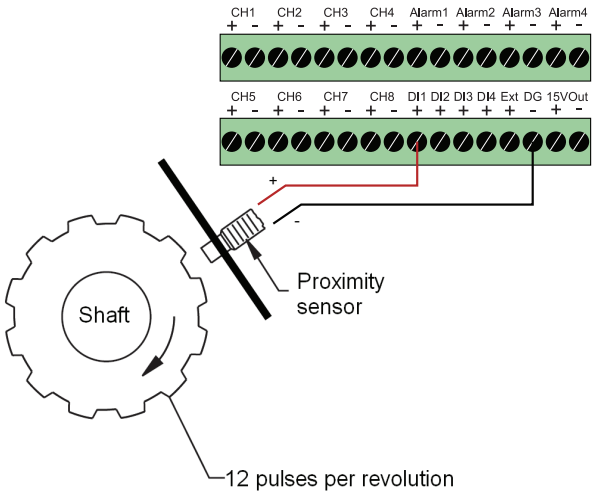
Each of four ZI-808 pulse inputs can be individually programmed as a simple true/false, count, or frequency measurement. The inputs are hardened to accept up to +30 V without damage, while still maintaining 500 kHz response for the count and frequency modes of operation.

Functions	Ranges	Label	Engineering Unit Scaling with EU Tag
Logic Level	none	32-character channel annotation	none
Count (accumulate)	up to 2^{32}-1 (>4.2 billion counts)		m and b scaling constants calculated by the instrument from user-supplied data:
Count (reset on interval)			
Frequency	500 kHz max.		

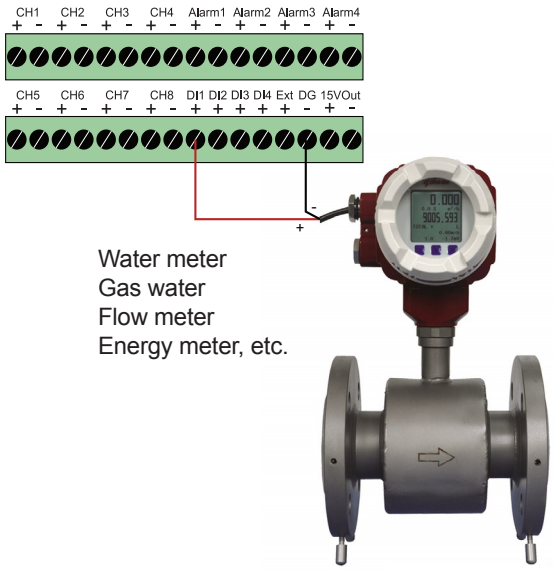
	Measured	EU
Scale Factor:	*	*
Units tag:	*	

*user-supplied data. Instrument calculates m & b

RPM measurement



Flow/volume measurement

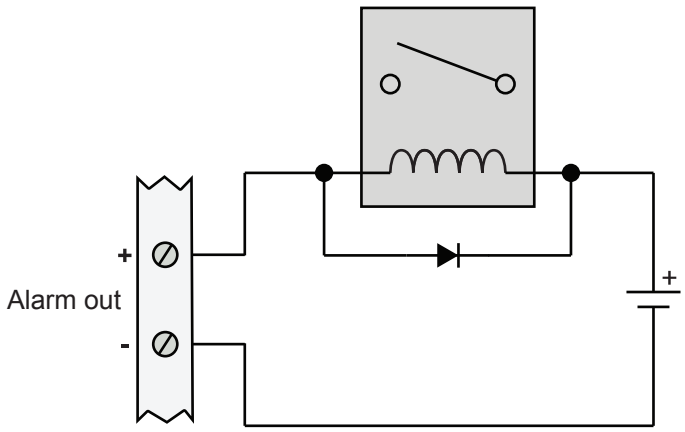


Four Alarm Output Channels

The ZI-808's four alarms each assume three forms. First, discrete outputs that can be used to trigger redundant warning or shutdown capability, or signal a PLC to take appropriate action when an event occurs. This eliminates the need for manual intervention in many circumstances. Second, the ZI-808 can be programmed to send an email/text alert to as many as five targets when an alarm state is active. Finally, each alarm channel is assigned a status LED on the ZI-808 panel and its virtual Web display, allowing at-a-glance alarm status determination.

Functions	Ranges	Label	Engineering Unit Scaling with EU Tag
Logic Level	TTL	32-character channel annotation	none
Email/Text	Up to 5 addresses		

A Typical Alarm Output Connection



ZI-808 Triggering Modes and Operation

Beyond allowing you to manually activate and stop data recording, the ZI-808 offers a vast array of triggering conditions based upon acquired analog or pulse values, and even the day-of-the-week, date, time, and an external event.

Analog and Pulse Input Channel Triggering

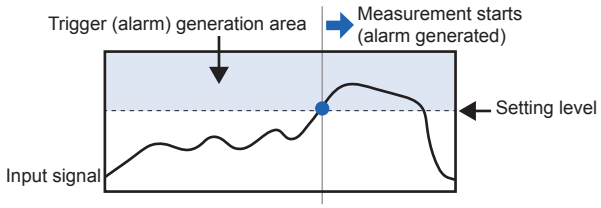
Trigger levels can be applied to analog or pulse input channels directly in scaled engineering unit values to determine when the ZI-808 should start and stop recording data. The ZI-808 supports four trigger detection methods: above level, below level, inside window, outside window. Trigger detection can be modified with a Boolean AND/OR function to define how the instrument triggers when multiple trigger channels are enabled. Finally, the ZI-808 can be set to trigger only once, or automatically re-arm itself.

Alarm Output Triggering

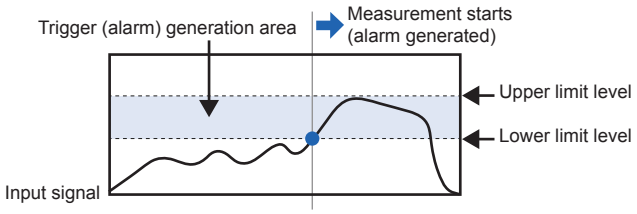
A completely different set of trigger levels can be applied to measured channels to define up to four independent alarms. Multiple channel triggers are Boolean ORed to arrive at a trigger condition for each alarm. The ZI-808 supports four trigger detection methods for each analog and pulse channel: above level, below level, inside window, outside window. A thermocouple burnout alarm can also be enabled, along with an edge qualifier, which allows a trigger event only when transitioning from a non-triggered to a triggered state. Alarms can be configured to hold the alarm state, or automatically reset when alarm conditions no longer exist. And each of the four alarms is tied to a panel LED and a discrete output port to be used by an external indicator, tied into a PLC, or some other application-specific purpose.

			Trigger Qualifiers		
Channel Type	**Level**	**Trigger**	**Boolean AND**	**Boolean OR**	**Action**
Any analog or pulse input channel	Single threshold Dual threshold	Above or below threshold Inside or outside window	Trigger conditions for all defined channels must be met.	Any channel trigger condition can be met.	Start/stop recording; send data after stop.
Any alarm output channel			**Level** Trigger whenever level(s) are breached.	**Edge** Trigger only when passing from non-triggered to a triggered state.	Start or stop recording; Set Alarm output port, send email/text alert.

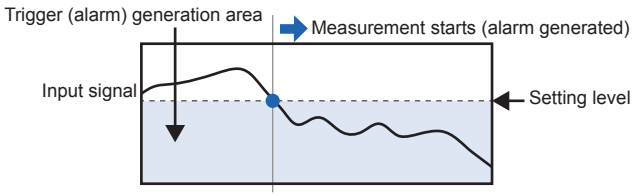
Above (single threshold)



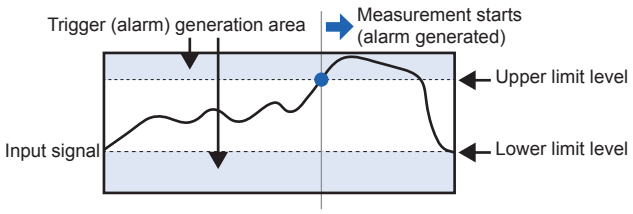
Window-in (dual threshold)



Below (single threshold)



Window-out (dual threshold)



Time, Date, Day and External Event Triggering

Stop and start recording cycles can also be triggered on a specific date and time. Selections also support daily triggers based on the day-of-the-week (Sunday through Saturday) and at a specific time-of-day. Finally, the ZI-808 can be triggered to start and stop recording based upon the discrete state of an applied external event. The start and stop states may be defined as high- or low-true, and a new file is created for each start/stop cycle.

Data Storage Formats and Destinations

When a recording session terminates, either automatically by the ZI-808's trigger facilities, or manually by your command, data can be placed on any combination of targets. The recorded record can be:

- Emailed to one or several addresses
- Stored to a server drive on the same LAN as the ZI-808
- Uploaded to an FTP or Secure FTP server
- Stored to a USB drive plugged into a dedicated ZI-808 socket reserved for that purpose

Regardless of destination, a backup of recorded data is transparently and automatically stored to the ZI-808's internal flash memory, where it's always available until deleted. Data file format is CSV (comma-separated value). You can view the CSV whilst recording. Two internal memory capacities are available: 4 GB and 32 GB.

Automatic Time and Date Stamping

Every file recorded by the ZI-808, and every sample in it is time and date stamped. The ZI-808 has a battery-backed up date and time clock embedded in its hardware design. This clock may be synchronized to the clock of any connected PC, or to a LAN- or Internet-based Network Time Protocol (NTP) server.

ZI-808 User Access Control

Access to the ZI-808's web server is controlled through two account levels: administrator and user. The administrator account has complete access to ZI-808 features. The administrator can enable, disable, and configure channels, triggers, alarms, and more. Any and every programmable feature of the ZI-808 can be accessed and changed by the administrator. In contrast, user accounts can only view settings and real time displays and are prevented from making any changes that could affect recorded data in any way. Both administrator and user accounts are separately password-protected.

Wide-ranging Sampling Interval Selections

The ZI-808 offers unprecedented control over how often you sample data. The instrument can sample all enabled channels (analog and pulse) as often as once every 25 milli-seconds or as infrequently as once every hour. And you have 18 intervals in between these limits arranged in a logically spaced range of selections. The ZI-808 even offers an external selection that allows the instrument to synchronize the acquisition of data to external events. For example, sample only when a piston reaches a defined position, only at top-dead-center, or only when commanded by a PLC.

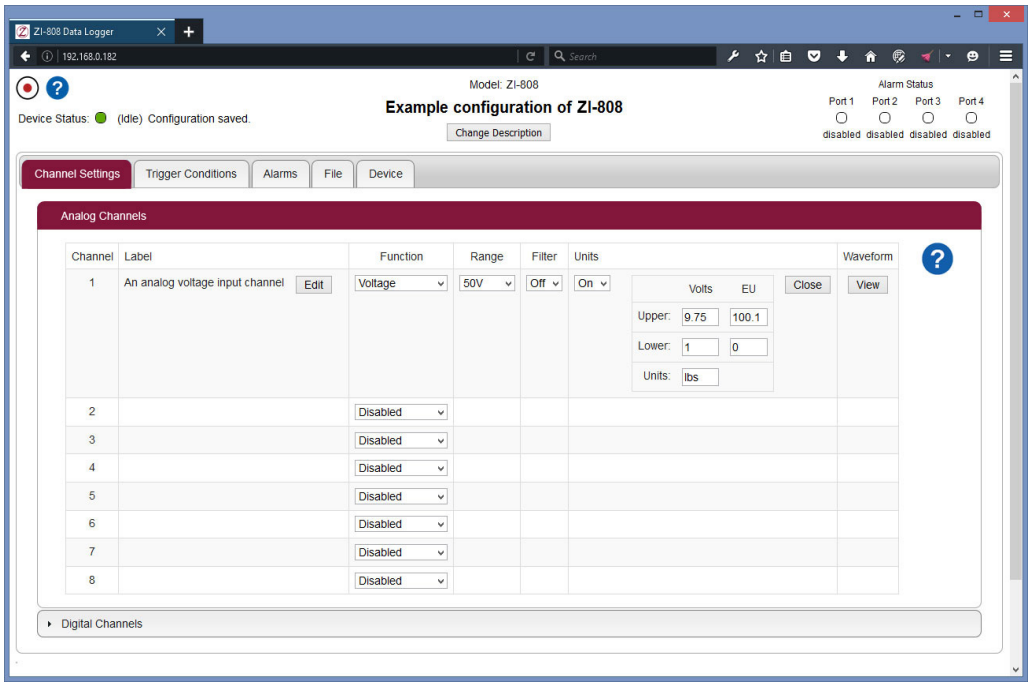
ZI-808 Selectable Sampling Intervals		
0.025 seconds	1 second	2 minutes
0.05 seconds	2 seconds	5 minutes
0.1 seconds	5 seconds	10 minutes
0.125 seconds	10 seconds	20 minutes
0.2 seconds	20 seconds	30 minutes
0.25 seconds	30 seconds	1 hour
0.5 seconds	60 seconds	External

ZI-808 Web Server Overview

Every ZI-808 configuration option is accessible through the instrument's on-board web server using any standard web browser (Chrome, Safari, Firefox, IE, etc.) The web server interface is divided into five major sections, each focusing on a specific aspect of ZI-808 operation. These sections work together to tailor the ZI-808 for specific measurement tasks.

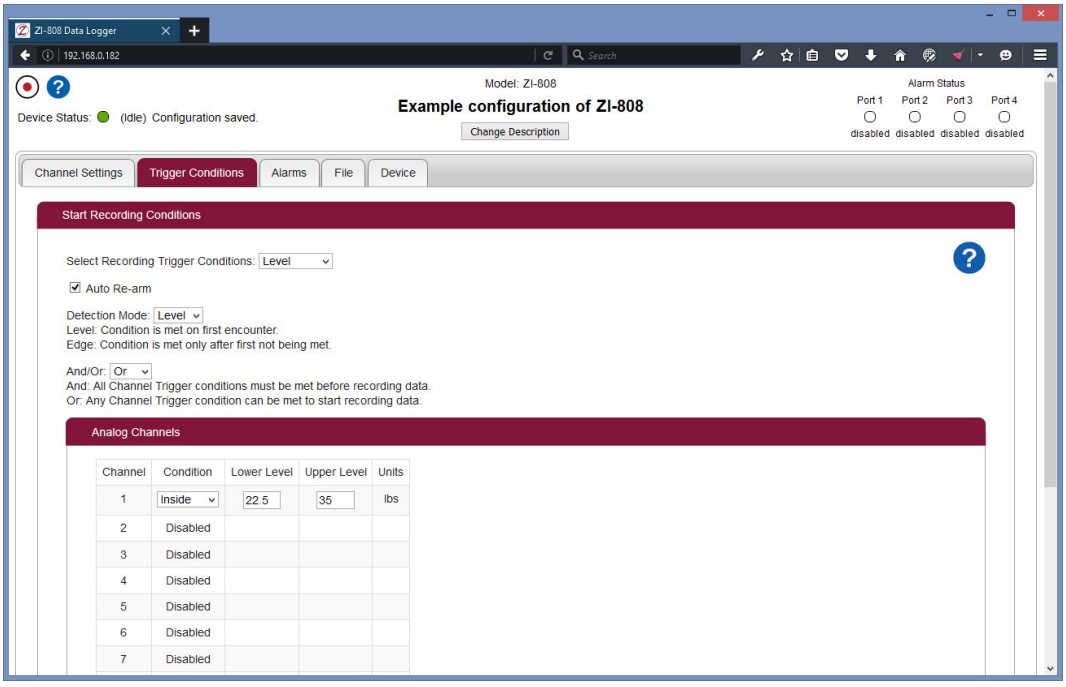
Channel Settings

Allows configuration of the ZI-808's eight analog input channels and four pulse input channels. Each analog channel can be uniquely labeled, configured for thermocouple type or input voltage range, accept a moving average factor for signal smoothing, and engineering unit scaling. A similar configuration is provided for the specific features of the pulse (digital inputs).



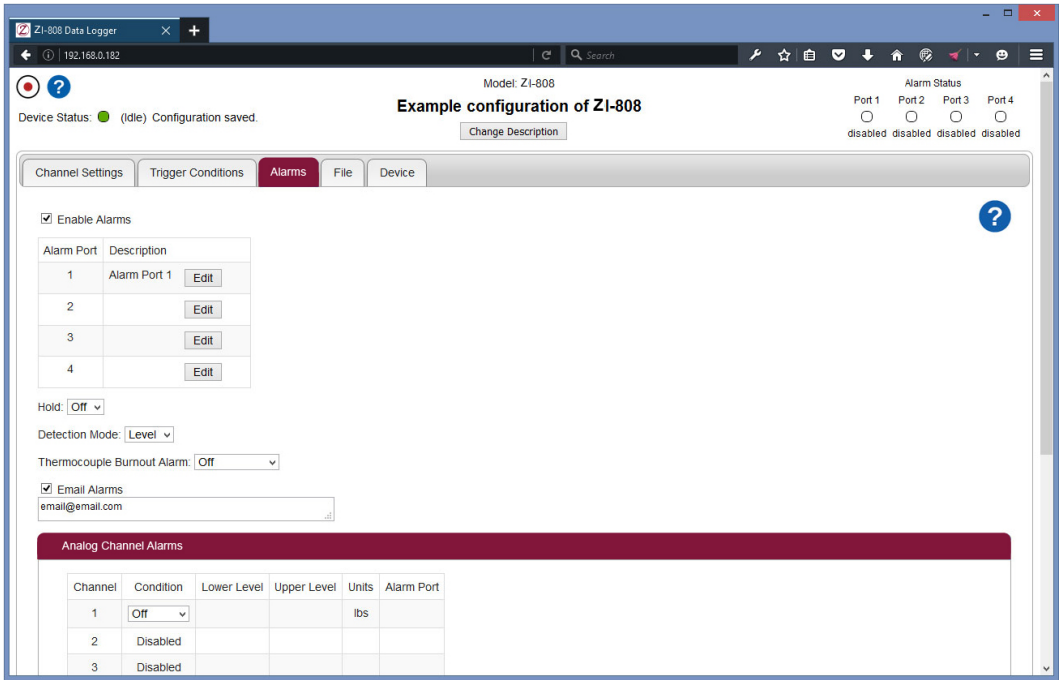
Trigger Conditions

Allows configuration of both stop and start trigger conditions based upon levels, alarms, date and time, and an external trigger. Individual trigger conditions can be set per analog and pulse channel, and multiple conditions are conditionally tested with a Boolean AND or OR function.



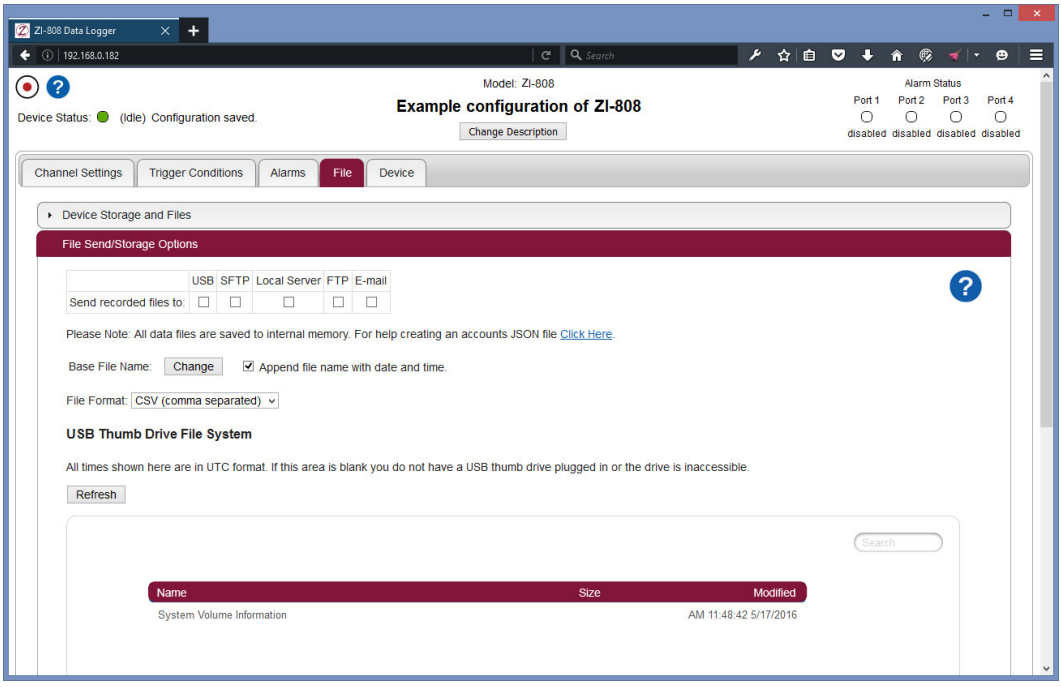
Alarms

Conditions as a function of acquired analog and digital/pulse data that can be used to trigger up to four different alarms. Alarms can either hold or clear automatically when the alarm state returns to false, and be either level- or edge-triggered. Email addresses may also be specified to send an email or text message when they occur (note that text messaging to an email address is supported by most major cellular providers).



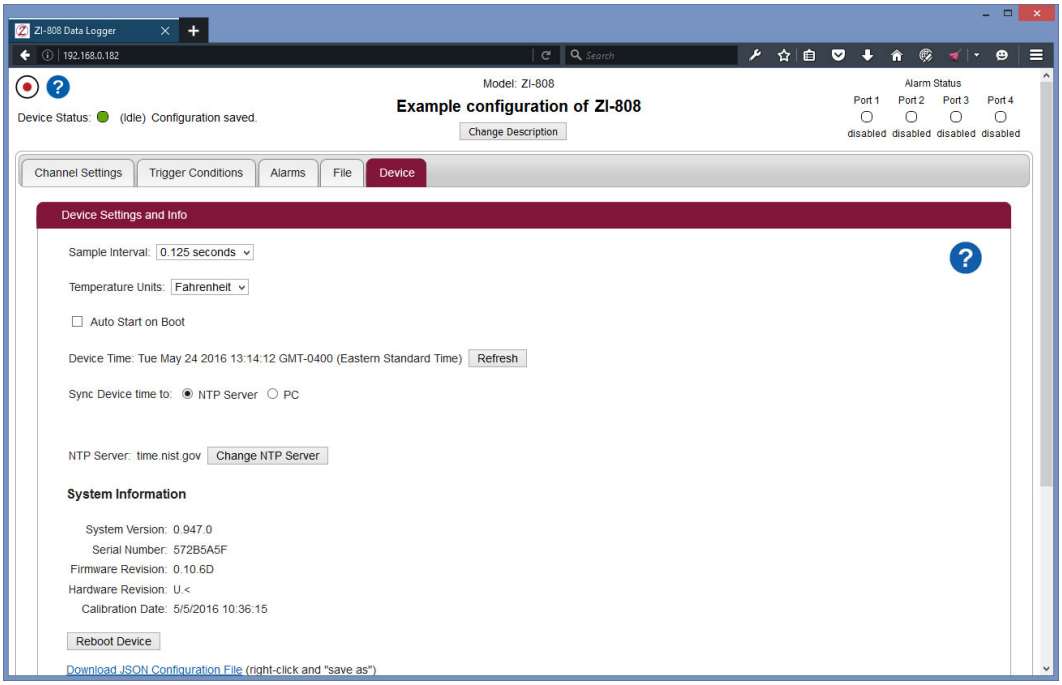
File

This is where you define where the ZI-808 sends data. You can send data to a server drive, a USB drive plugged into the ZI-808, an FTP or SFTP server, or as an email attachment. Select any one or any combination of destinations, with data always recorded to the ZI-808's internal flash memory as a backup. You can even browse and download files stored locally in the ZI-808's non-volatile internal and USB drive external memory. Data file format is CSV (comma-separated value). You can view the CSV whilst recording.



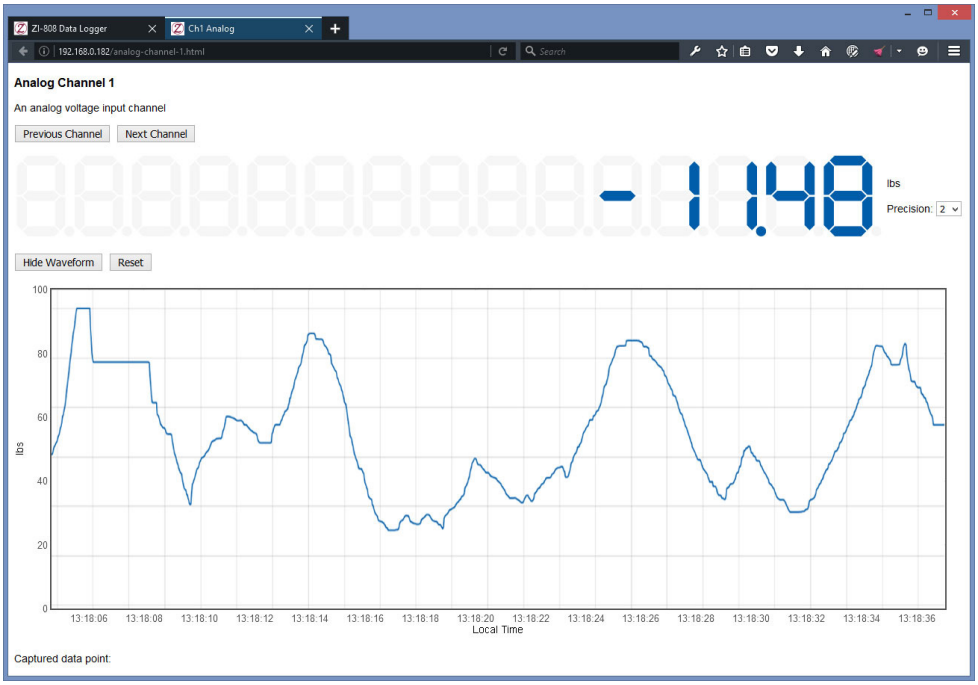
Device

This is where global device settings can be found: Sampling interval, °F/°C, device time, Network and user configurations.



Display

Finally, accessible at any time is a functional real time display of data as it is acquired. Buttons allow channel navigation with point-and-click ease, and waveform data is available as a dot chart and as a digital display in engineering units.



ZI-808 Specifications

Analog Inputs

Number of Channels: 8

Configuration: Differential, Isolated

Isolation: Input-to-output, channel-to-channel

Measurement type per channel: Voltage, Thermocouple

Programmable thermocouple types and measurement range per channel:

Over 25 ±3 °C ambient temperature
Stable ambient temperature
Following 60 minutes warm-up
Excluding common mode error
Excluding thermocouple error

TC type	Temperature Measurement range (°C)	Accuracy (°C)
J	-190 to 1200	±(0.1% of span + 2)
K	-180 to 1360	
T	-190 to 400	±(0.1% of span + 1)
B	600 to 1000	±(0.2% of span + 4)
	1001 to 1810	±(0.1% of span + 3)
R	-40 to 300	±(0.2% of span + 6)
	301 to 1760	±(0.1% of span + 3)
S	-40 to 400	±(0.2% of span + 6)
	401 to 1750	±(0.1% of span +3)
E	-160 to 990	±(0.1% of span + 1)
N	-170 to 50	±(0.1% of span + 3)
	51 to 1290	±(0.1% of span + 1)

Programmable voltage ranges per channel:

At 25 °C ambient temperature
Following 30 minutes warm-up
Excluding common mode error

Range (±)	Accuracy
10 mV	±(0.05% of span + 10 µV)
25 mV	
50 mV	
100 mV	
250 mV	
500 mV	
1 V	
2.5 V	
5 V	
10 V	
25 V	
50 V	

Input impedance: 1MΩ all ranges

Absolute maximum input without damage: 120 V (±dc or rms)

Maximum common mode voltage: 120 V (±dc or rms)

Minimum common mode rejection: (330Ω unbalance) >100 dB (dc to 60 Hz)

Channel-to-channel crosstalk rejection: (Rsource ≤ 330Ω; Freqsource ≤ 60 Hz) >110 dB

Alarm and trigger hysteresis: Voltage: ±0.5% of the full scale range; Temperature: ±0.3 °C

Digital/Pulse Inputs

Number of channels: 4

Pull-up value: 4.7 kΩ

Isolation: None

Input high voltage threshold: 1.80 V minimum

Input low voltage threshold: 1.40 V maximum

Absolute voltage (V) input without damage: 0 ≤ V ≤ 30 V

Maximum count value: 2^{32} - 1 (.csv format)

Maximum measured frequency: >100 kHz (.csv format)

Alarm Outputs

Number of channels: 4

Maximum drain voltage: 30 V

Maximum sink current: 100 mA

ADC Characteristics

Voltage measurement Resolution:

Range (±)	Resolution	Units
10 mV	305	nV
25 mV	763	
50 mV	1.52	µV
100 mV	305	
250 mV	763	
500 mV	15.3	
1 V	30.5	
2.5 V	76.3	
5 V	152.6	
10 V	305	
25 V	763	
50 V	1.53	mV

Minimum temperature measurement resolution:

TC type	Resolution	Units
J	0.086	°C
K	0.096	
T	0.037	
B	0.096	
R/S	0.111	
E	0.073	
N	0.092	

4-20 mA current loop resolution: (±5 V range with 250Ω shunt resistor) 26,214 ADC counts over the 4-20 mA range

Programmable sampling intervals: 25, 50, 100, 250, 500 mS
1, 2, 5, 10, 20, 30 S
1, 2, 5, 10, 20, 30 minutes
1 hour, External

Internal Memory

Type: Non-volatile flash

Size: 4 GB (standard); 32 GB (optional)

Use: Automatic backup of recorded data

Indicators and Controls

Signal I/O: Dual, removable 16-position screw terminal connectors

Power connector: 2.0 mm center pin, 5 mm shell

Status light: One multicolor LED indicating status

Alarm lights: 4 multicolor LEDs

Ethernet interface connector: RJ45

USB drive receptacle: Type A male

USB connector: Mini B style (usage is reserved)

Control button: Push type to set device operating mode

Ground: Screw terminal to establish Earth ground.

Power I/O

Input power requirements: 9-36 V dc @ 7.5 Watts
9-36 V dc @ 10 Watts (w/excitation)

Excitation power supply output: 15 V dc @ 2 watts

Environmental

Operating temperature range: 0 to 40 °C (32 to 104°F)

Storage temperature: -20 to 40 °C (-4 to 104°F)

Storage humidity: 0-90%RH, non-condensing

Physical Characteristics

Enclosure: All-metal. Steel top, aluminum base

Mounting: Desktop, Bulkhead with optional brackets

Dimensions: 57/16 D × 41/8 W × 11/2 H inches
13.81D × 10.48W × 3.81H cm

Weight: <1 lb. (<453 grams)

ZI-808 Specifications (continued)

Configurable Components

Network variables:	IP address, Subnet mask, Gateway, DNS
Account log-on information:	For FTP, SFTP, SMB, SMTP
User log-on information:	User and administrator names and passwords

Supported Standards

Network Time Protocol (NTP):	Syncs internal time and date clock to Internet time
File Transfer Protocol (FTP):	Allows the instrument to push recorded data to an FTP/SFTP server
Secured File Transfer Protocol (SFTP):	
Server Message Block (SMB) protocol:	Allows the instrument to record data to a local server drive
Simple Mail Transfer Protocol (SMTP):	Allows the instrument to send data and alarms to multiple email addresses

Display Subsystem

Digital display:	Numeric display of acquired values scaled into engineering units in real time. Selectable precision of 1 to four digits to the right of the decimal point.
Waveform display:	Scrolling plot of selected channel data in real time versus time of day.
Alarms status:	Virtual LEDs display the status of the four alarm outputs

Channel Settings Subsystem

Analog channel configuration:	Voltage and measurement range, temperature and thermocouple type, moving average filter, engineering units, channel label
Digital/pulse channels:	Discrete, count, count with reset, frequency, engineering units, channel label

Trigger Subsystem

Start or stop recording trigger conditions:	Level: Above/below level, In/out window Alarm: Upon alarm activation Date/time: Specific date and time. Daily selection External
Auto rearm:	Enabled or disabled

Alarm Subsystem

Level or edge selection:	Level: Alarm is activated when alarm condition is met on first encounter Edge: Alarm is activated only after first not being met.
Analog/pulse channel levels:	Above/below level, In/out window
Thermocouple burnout:	Any burnout detected on a TC channel
Selectable alarm ports:	1-4
Alarm hold:	Enable/disable

File Subsystem

File browse/download:	Browse files on the ZI-808 internal flash memory or connected USB drive and allow selectable downloads to the client device.
Format local file storage:	Formats internal flash memory, erasing previously recorded files and reallocating file space for new recorded data.
Get local file space:	Returns the available file space.
Base file name:	Allows recorded files to be assigned a definable file name, and to optionally have date and time appended.
File type:	Allows the recorded file format to be defined as either ASCII CSV or binary WDH.

Device Subsystem

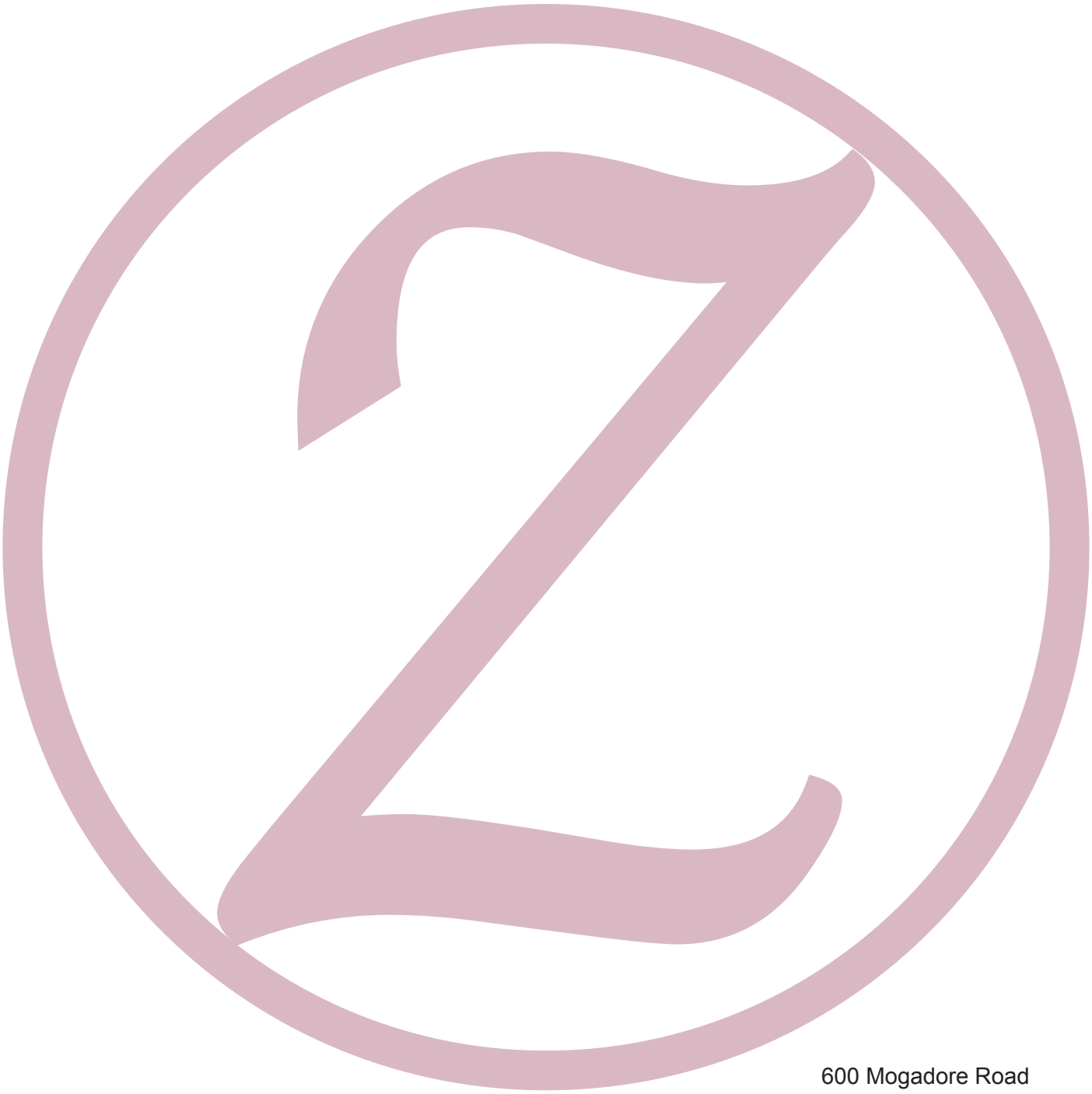
Device settings and information:	Program device sampling interval, temperature units (°F/°C), enable or disable auto start on boot feature, time/date/ synched to connected PC or NTP server, reboot device.
Network configuration:	Configure device IP address, DNS, Subnet mask, Gateway.
Users and accounts:	Configure user and administrator names and passwords.

Ordering Guide

Description	Order No.
ZI-808 Web-based Data logger with 4GB Memory Includes ZI-808, ac adaptor, NIST-traceable calibration certificate. Provides 4 GB of non-volatile internal data file storage.	ZI-808
250Ω 4-20 mA shunt resistor ±0.1%, 0.5 Watts max., ±50 ppm/°C	Contact Us
Ambient Temp and RH Sensor -40 to +60 °C, 0 to 100% RH Measurement Range. Powered by the ZI-808.	Contact Us
Mounting bracket Right-angle mounting brackets for bulkhead mounting model ZI-808.	Contact Us

Description	Order No.
ZI-808 Web-based Data logger with 32GB Memory Includes ZI-808, ac adaptor, NIST-traceable calibration certificate. Provides 32 GB of non-volatile internal data file storage.	Contact Us
Power Connector Dc power connector for powering the ZI-808 from a source other than the provided ac adaptor.	Contact Us
Bottom Screw Terminal Block Spare 16-port removable screw terminal block for BOTTOM of ZI-808 screw terminal block receptacle.	Contact Us
Top Screw Terminal Block Spare 16-port removable screw terminal block for TOP of ZI-808 screw terminal block receptacle.	Contact Us

Zintronix



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