CP2 CONFIGURATION TOOL GUIDE v 3.9.2

A jumpstart to video telematics configuration



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Introduction

1 Welcome to Your CP2 Configuration Guide

This guide aims to inform users of the proper processes involved in setting up your Sensata INSIGHTS CP2 device.

This step-by-step walkthrough will act as your teacher as you learn our product's layout, functionality, and configuration settings. Each section shown in this guide features the CP2's default settings.

You can find an overview of the configuration tool's layout in <u>section 3</u>.

The fastest way to find information in this document is through the Table of Contents.

We hope this training document will remove common end-user pain points involved with the setup process. If you experience any issues with this guide, please lend us your feedback and/or contact our <u>support</u> teams.

Note: Use this configuration guide with at least version 3.9.2.0 of the CP2 Configuration Tool. Content in this guide was released in coordination with CP2 firmware version 3.9.2.

CP2 Download & Installation

2 CP2 Configuration Tool Installation

<u>Goal</u>: Find your configuration wizard and learn about your device's capabilities

2.1 Downloading & Installing Your Configuration Tool

• Download configuration software <u>here</u>.





- 1. After downloading, proceed to installation.
- 2. Open the configuration tool and insert your SD card*.
- 3. Click Initialize SD Card.
- 4. Select the **SD Card** from your preferred internet browser.
- 5. Click Start to initialize.

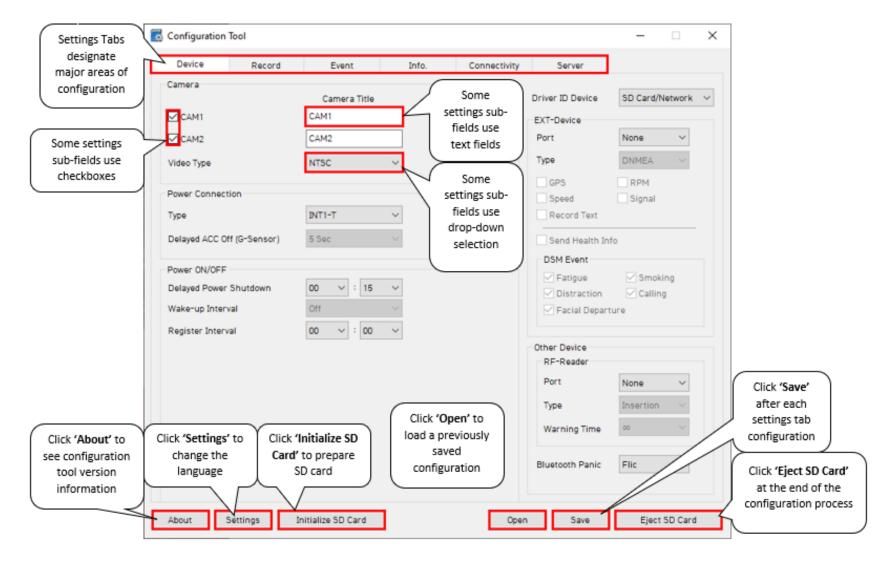
Note: SD cards from Sensata INSIGHTS come pre-installed and initialized.

*The maximum size supported for your SD card is 128 GB.

CP2 Configuration Tool Layout

3 Configuration Tool Layout & Settings

<u>Goal</u>: Understand your tool's main features



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4 Configure your Device

Goal: Personalize and optimize device settings

4.1 How to Configure Device Tab

Device Tab Layout: At a Glance

Device	Record	Event	Info.	Connectivity	Server			
amera					Driver ID Device	0.0.0.1/1		
_		Camera Title			-	SD Card/N	etwork	~
		CAM1			EXT-Device 7			
CAM2		CAM2			Port	None	\sim	
/ideo Type		NTSC	\sim		Туре	DNMEA	\sim	
					GPS	RPM		
ower Connection					Speed	Signal		
Гуре		INT1-T	~ 2		Record Text			
elayed ACC Off (0	G-Sensor)	5 Sec	~ 3		Send Health In	fo		
			-		DSM Event			
ower ON/OFF					🗹 Fatigue	🗹 Smoki	ng	
Delayed Power Sh	utdown	00 ~ : 15	~ (4)		✓ Distraction	🗹 Calling	3	
Vake-up Interval		Off	- × (5)		🗹 Facial Depart	ure		
Register Interval		00 🗸 : 00	~ 6					
					Other Device			
					RF-Reader 😕			
					Port	None	\sim	
					Туре	Insertion	\sim	
					Warning Time	∞	\sim	
					Bluetooth Panic	Flic	~	
About Sett	tings	Initialize SD Card]	Oper	n Save	Eject	SD Card	

Camera

- 1. Activate both primary and secondary cameras by checking **CAM 1** and **CAM 2.**
 - Set the second camera video standard via Video Type.
 - NTSC is the default for 5V Sensata INSIGHTS driver-facing cameras.

	Camera Title
	CAM1
	CAM2
Video Type	NTSC

Power Connection

- 2. Select the device's power **type** from the dropdown options.
 - INT1-T is CP2's standard.
- To enable CP2's G-Sensor wake-up function, select from Delayed ACC Off (G-Sensor) options. There are certain conditions that must be activated before this feature is operational.
 - Check Wake-up in the G-Sensor tab.
 - Type in Power Connection must be Cigar/Direct.



Power On/Off

- Select the time your CP2 remains on after ignition off via **Delayed Power** Shutdown's dropdown options.
- 5. Set the time, or **Wake-up Interval**, until your CP2 powers on again after shutting down.
- 6. Set the time, or **Register Interval**, that your CP2 stays on during its Wake-up Interval.

Power ON/OFF			~
Delayed Power Shutdown	00	~ : 15	~ (4)
Wake-up Interval	Off		~ 5
Register Interval	00	~ : 00	~ 6
			_

EXT-Device

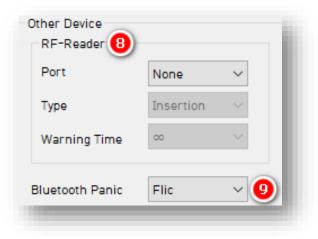
7. To allow external devices to work with your device, select from EXT – Device's list of accessory devices and relevant data points. Add-ons connect to the device's serial input once you choose the S1 port.



Note: DSM event access requires specific "Driver State Monitoring" Al camera models like KP2.

Other Device

- 8. **(Optional)** Set up an accessory device (Radio Frequency Reader) that connects to the serial input. Set reader **Type** and **Warning Time**.
- Allow your device to operate with a wireless Bluetooth Panic button.
 Locate setup specifications <u>here.</u>



Note: Contact Sensata INSIGHTS about RFID system compatibility. INSIGHTS' SmartID replaces the need for RFID systems to manage driver identification.

4.2 How to Configure Record Tab Record Tab Layout: At a Glance

Devic	9	Record	~	Event	Info.	Connectivity	Server		
Channel CH1 CH2	Resolut 720p D1		VISC FPS V	Cuality High V High V			Data Usa Disk Size	ge Calculation 64GB Calculate	~
Pre-Eve Post-Ev Park	Mode ous)% nt ent	Cont	inuous 10 Sec 10 Sec 10 Sec 15 Mode O	~ 7	Overwrite	9	0 Days	1000 ~ 99 2 Hours	999999
Telemat Enab Duratio		- 	ıt 40 Hour	5 🗸	Overwrite	9) Retention Period	0 Days	2 Hours	~
About	Set	tings	Initiali	ze SD Card		Open	Save	Eject SD	Card

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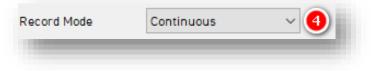
Channel

- 1. Select your **Resolution** from the following options:
 - CH1: VGA, HD (720p), FHD (1080p).
 - CH2: **D1** (720 x 480).
- 2. Select from the following **Frame Rate** (**FPS**) options:
 - 30, 15, 10, 5, 4, 3, 2, 1 and 0.
- 3. Choose your default video **Quality** from the following:
 - Normal, High or Super Bitrate. Higher-quality video contains more detail but consumes more storage space on the SD card.

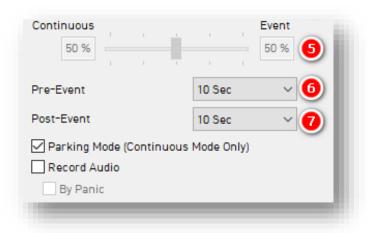
Channel	1 Resolut	ion		2 ITSC FPS	(3 Qual) ity
CH1	720p	\sim	5	~	High	\sim
CH2	D1	\sim	5	~	High	\sim

Video Data

- 4. Select your preferred **Record Mode** from the following:
 - Event: Events only. The pre & post-event setting determines settings.
 - Continuous (Default): Video continuously records, with no events recorded separately on the SD card (Events are still sent to SmartAPI if configured in the <u>Server</u> tab). This setting renders pre and post-event capture settings void.
 - Continuous+Event: Video continuously records at 1 FPS. Events will record at your specified FPS.



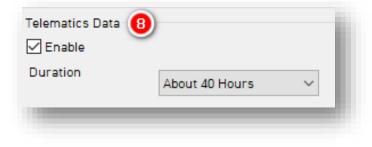
- 5. If you choose **Continuous + Event** mode, set the SD card's ratio of video data recording.
- 6. Determine the time video records before an event and set your **Pre-Event Setting.**
- 7. To set the time video records after the event, choose your **Post–Event Setting.**



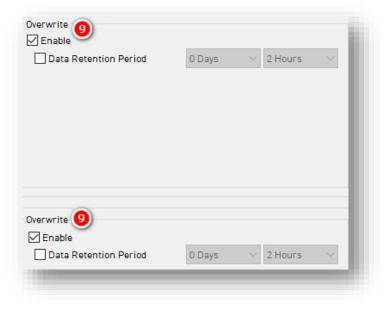
Note: Pre/post time settings do not apply to "Continuous" record mode. **Parking Mode** reduces FPS to 1 when the vehicle idles for 5 min.

Telematics Data

 Set the duration of your DRV Storage by clicking Enable and selecting Duration. DRV files record and are stored from video/event logs separately.



- 9. To turn on the device's overwrite feature, click **Enable.** This automatically rewrites SD card video footage and telematics data.
 - Data Retention Period determines how long video and telematics data remains on the SD card before being rewritten.



 Protect SD card data from being easily viewable by entering an 8-digit Encryption No.



Note: Use the Data Usage Calculation to estimate your SD card's storage capacity based on your applied recording settings.

Data Usage C	alculation	- 10
Disk Size	64GB	\sim
		- 1
		- 1
Cal	culate	
-		-

Event

4.3 How to Configure Event Tab

4.3.1 G-Sensor Fields

Event > G-Sensor Tab Layout: At A Glance

Device	Record	Event	Info.	Conn	ectivity	Server	
G-Sensor	Misc.	Geofence					
G-Sensor	ist G-Sensor to ve	Record Record		Mask CH	Mask Audio	Alarm Out 1 None V	Wake-up
Smart G-Senso	-	0.0					
O Pre-set	etting Mode (5)	<u> </u>	Custom gh Impact 🜈			Turn Z Axis o	n
Sensitivity	5		G (0~4000)	X Y 950 950	Z 2000		
Shock	5	H	z (1~20)	3 3	20		
Accel/Brake	5	∼ Ha	arsh Accel/Bra	ake 🕚			
Turning	5	~ m	G (0~4000)	450			
Emergency C	all Trigger 🙆	H	z (1~20)	10			
mG (0~4000)	XY	Z Ha	arsh Turn 🥑) _Y			
mG (0~4000)	3700 3700		G (0~4000)	350	1		
		H	z (1~20)	15]		
			Trigger high i	impact events	only 🕕		
out Set	tings Init	ialize SD Card			Open	Save	Eject SD Card

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Event

G-Sensor

- 1. Automatically scale G-Sensor speed thresholds by clicking **Auto adjust G-Sensor to vehicle speed.** This increases your G-Sensor event threshold on each axis by 300mcg when the vehicle exceeds 20 km/h.
- Turn on/off event recording for cameras 1 and 2 by checking **Record CH.**
 - Only available for Event and Continuous + Event mode.
- 3. To enable in-vehicle notifications for G-Sensor event triggers, click **Beep.**



Note: Individual selection of camera channels disables when your device is in "Continuous" mode.

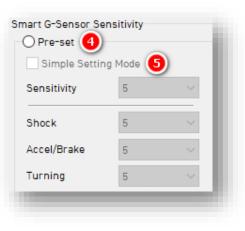
Smart G-Sensor Sensitivity

Determine your G-Sensor sensitivity with **Pre-Set** or **Custom** options.

- To set general sensitivity settings, check Pre-Set. Lower sensitivities result in fewer G-Sensor-related events. Higher sensitivities result in more events.
 - Disable Simple Setting Mode to set Shock, Accel/Brake and Turning settings.

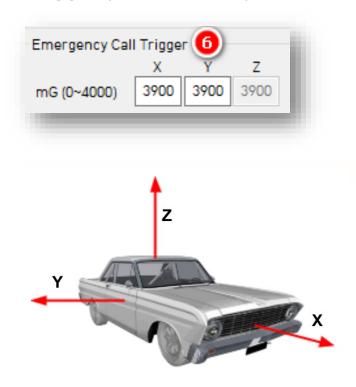
Page **15** of **33**

 To set an overall G-Sensor sensitivity, click Simple Setting Mode, then Sensitivity.



Event > G-Sensor

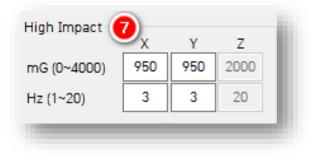
 Events generate when the X, Y or Z axis acceleration exceeds the set G-Sensor threshold for Emergency Call Trigger (Severe Shock).



Custom

Click **Custom** to set personalized G-Sensor sensitivity settings.

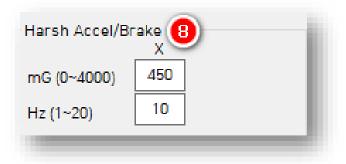
7. **High Impact** events occur if acceleration exceeds the X, Y or Z axis threshold (Activate the Z axis via **Turn Z Axis on**).



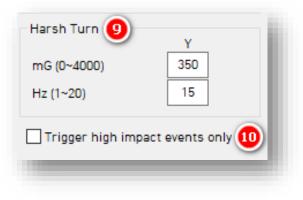
Note: Hz values set the number of times in a row the device's G-Sensor must exceed the X, Y or Z thresholds to trigger a harsh event. "Simple Setting Mode" is fixed at 1Hz. "Custom" is adjustable.

Event > G-Sensor

8. Harsh Accel/Brake events generate if acceleration exceeds the X axis threshold.



- 9. **Harsh Turn** events occur if acceleration exceeds the Y axis threshold.
- 10. Check **High Impact Trigger** to limit alerts to high-impact events. This disables Accel/Brake and Turn events.



Event > Misc.

4.3.2 Misc. Fields

Panic Button

- 1. Determine your **Panic Button** response settings.
 - Turn on audible in-cabin notifications for panic events by selecting **Beep**.
 - Alarm Out sends a 5V output through Alarm Out (Yellow Wire).

Panic Button	Record CH	Beep	Mask CH	Mask Audio	Alarm Out 1 None V

Overspeed

- 2. Set your speed threshold in the **Speed Limit** field for recording Overspeed events.
 - Accounts for vehicle speed, not regional speed limits.

				Mask	
Speed Limit	Record CH	Beep	Mask CH	Audio	Alarm Out 1
125 km/h Over					None v 2
		_		_	
		Speed Limit Record CH 125 km/h Over			Speed Limit Record CH Beep Mask CH Audio

Event > Misc.

Alarm-In

- 3. To set your optional alarm input triggers, check **Use**. Label them in the **Title** field according to your input type (i.e., doors, horn, lights, etc.).
 - Alarm 1 = Orange Wire
 - Alarm 2 = Green Wire
 - Input Types:
 - N-C (Normally Closed Circuit)
 - N-O (Normally Open Circuit)
 - V-On/Off (12V)

Alarm	In ()	
Use	Title	Туре
\checkmark	ALARM1	V-Off 🗸
\checkmark	ALARM2	N-0 ~

- 4. Select the alarm duration for a thirdparty device from **Alarm Out 1**.
 - Sends a 5V output through the Yellow Wire to your 3rd party device.
- 5. Turn on CP2 when an Alarm Input triggers by enabling **Wake-up.**
 - CP2 stays on for the time set in **Register Interval**.



Event > Misc.

EXT-Signal

6. Signal events are reserved for RS232 accessory devices with their own event triggers (like an ADAS or DSM camera). This allows CP2 to configure recording, masking and display rules for accessory devices. EXT-Signal serves no purpose beyond RS232 accessory devices.

Use	ignal 6 Title	Record CH	Beep	Mask CH	Mask Audio	Alarm Out 1	Alarm Out 2
	LEFT					None 💎	None 💎
	RIGHT					None 💛	None 🗸 🗸
	BRAKE					None 💎	None 💎
	REVERSE					None 🗸	None 🗸 🗸

Event > Geofence

4.3.3 Geofence Fields

Set virtual boundaries for your device to record events. Optionally, obscure your camera's field of vision and audio recording.

- 1. To enable your device's Geofence, click **Use.**
- 2. Select the **Type** of Geofence.
 - In activates a Geofence when the vehicle *enters* the geographic boundary.
 - **Out** triggers when the vehicle *exits* the geographic boundary.



- 3. Audibly notify drivers that they have crossed the Geofence's boundary by clicking **Beep.**
- 4. To obscure camera channels 1 & 2, check **Mask CH.**
- 5. To prevent the device's audio recording, check **Mask Audio.**
- 6. Set the alarm's duration for a thirdparty device from **Alarm Out 1**.

3 Beep	4 Mask CH	5 Mask Audio	6 Alarm Out 1	Alarm Ou	t 2
			None 🗸	None	~

Event > Geofence

Zone Selection

To set geofence boundaries on Google Maps, click on **Zone Selection.** You may set up 40 geofence zones.

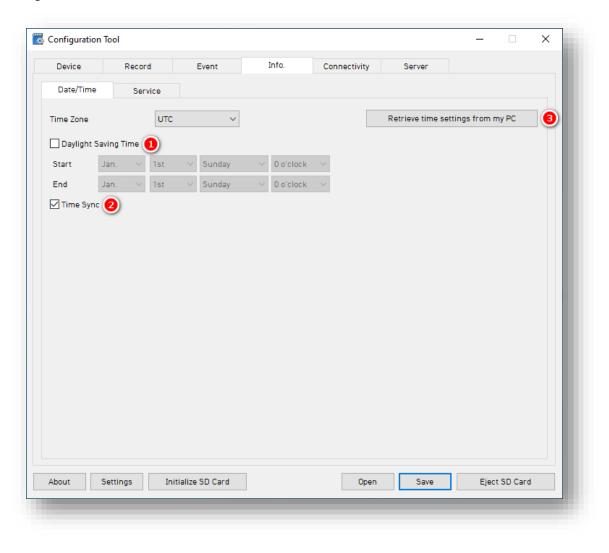
1. Search for the geographic region by entering an address into the text field and clicking **Go.**

- 2. Change the name of your Geofence in the **Title** text field.
- 3. To set a location-specific perimeter, click on the map.
 - The area in **Red** is your Geofence.
- 4. Enable your Geofence by clicking Add.
- 5. To remove a Geofence, check the Geofence **No.** and click **Delete.**

Geofence		2		(4)	5 ×
1016 lunt ave	Go 🚺	Title	Geofence	Add	Delete
Map Satellite	Village Tavern & Grill 😲	Schaumburg Auto Bo	Scha W Wise P	NO.	Title
PH So Crest Ave	Six Star Motorsports	Estes Ave	ow Inc 🌳		
Rode	Lunt Ave 3	Lunt Ave Jerry's I	Hockey 🕑		

Info

4.4 How to Configure Info Tab Info Tab Layout: At a Glance



Info > Date/Time

4.4.1 Date/Time Fields

Setting time preferences on your CP2 is **not recommended**. PC Viewer software and Smart API automatically adjust UTC to your local time zone. **If you've connected your CP2 to Smart API, do not set time preferences.**

- 1. Set a customized date and time range for **Daylight Savings Time**.
- 2. Ensure GPS time syncs with device OS time by clicking **Time Sync.**
- 3. Use PC Viewer software to set your device's time zone by clicking **Retrieve time settings from my PC.**

me Zone			UTC	~			Retrieve time settings from my PC
Daylight	Saving T	ime (1				
Start	Jan.	\sim	1st	Sunday	0 o'clock	\sim	
End	Jan.	\sim	1st	Sunday	0 o'clock	\sim	

Info > Service

4.4.2 Service Fields

System

- 1. Determine how your device reads vehicle speed via **Speed Source**.
- 2. Set a Speed Unit.
- 3. CP2 automates necessary SD card maintenance when the **Auto Format Feature** is on.
 - This feature formats blank SD cards automatically.
 - It will not format corrupted SDs. Instead, the device sends a "Media Error" event to the server. The red LED and an optional audible alarm (See <u>System Warning</u>) turn on.

System		
Speed Source	GPS	~ 1
Speed Unit	km/h	~ 2
Auto Format Feature 3		

User Management

- 4. Assign a number to your vehicle by checking **Vehicle No** and entering a numerical value.
- 5. Write a unique **Driver ID** in the text field for different vehicles.

Note: You can watermark **Vehicle No** & **Driver ID** on your MP4 converted video feed with desktop analysis software.

User Management	
Vehicle No	4
Driver ID	5
-	

Info > Service

System Warning

- 6. Provide notifications concerning system component corruption and/or failure by checking **Use.**
- 7. Check any/all boxes to send alerts of system corruption and/or failure.

System Warning		1.1
🗹 Use 🜀		- 81
Source 7		- 8
SD Card	Temperature	- 81
Video Loss	AUX	- 81
		_

8. To enable these event notifications, click **Alarm out1**, **Beep** and **Alarm LED**.

Event 8	☑ Alarm LED
Alarm out1	☑ Beep

Connectivity

4.5 How to Configure Connectivity Tab Connectivity Tab Layout: At A Glance

Configuration To	ol					-		×
Device	Record	Event	Info.	Connectivity	Server			
🗹 Enable 🚺								
Mobile Network	_							
Dial No.	*99#							
APN								
User ID								
Password								
Wi-Fi			-					
AP	1		~ 3					
SSID			4					
Password			4					
	Passwo	ords must be at lea		ers.				
About Set	ttings Init	tialize SD Card]	Open	Save	Eject S	D Card	

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Connectivity

Mobile Network

- 1. To specify mobile and WIFI network settings, check **Enable**.
- 2. Add **Mobile Network** details to relevant fields.
 - Ensure the **APN**, if you use a Sensata INSIGHTS AT&T SIM, is "smartwitness.com.attz."

🗹 Enable 🚺	
Mobile Network 2	
Dial No.	*99#
APN	
User ID	
Password	

Wi-Fi

- Your CP2 has built-in Wi-Fi. Select your AP from the options provided. Your AP must be secure, accompanied by WPA/WPA2 encryption.
- 4. You can set up to 10 Wi-Fi **SSIDs**. The CP2 will scan for as many networks as are added in your settings.
- 5. Enter a **password**.

Wi-Fi	
AP	1 ~ 3
SSID	•
Password	
	Passwords must be at least eight characters.

Server

4.6 How to Configure Server Tab

4.6.1 Main Fields

Server > Main Tab Layout: At A Glance

Device	Record	Event	Info.	Connecti	vity S	erver			
Main	Triggered Event								
Domain/Static I	P and Port #	http://sv.smart	witness.co:5000	D/api	ex) http://Do	mainName:50	DO		
License Key	•								
Transmit									
Tracking Dat				Telematics Da					
🗹 Transmit	Live Tracking Dat	a 🕗		🗹 Transmit T	elematics Da	ta (DRV) 🕙			
Live Tracki	ng Data Type	LiveTrack2	\sim	G-Sensor/G	yro Data	None		\sim	
				Data Type		Default		~	
				Data Type		Derauti			
Event Data				Emergency Ca					
Transmit	Event Data 3			Transmit E					
	G-Sensor/Gyro D	ata			remperature V				
					emperature v	varning			
Event Images									
🗹 САМ1 🙆	CAM2								
Pre-Event	5 Sec	~	Event FPS		1	×			
Post-Event	5 Sec	~	Event/Snap	shot Quality	Normal	~			
out Set	tings Init	ialize SD Card			Open	Save	Ejec	t SD Card	1

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Server > Main

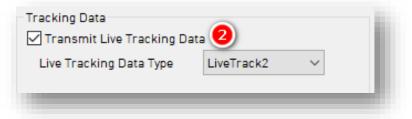
Server

 Sensata INSIGHTS, or your service provider, will give you the Domain/Static IP and Port # URL and the License Key (If necessary) to enter here.

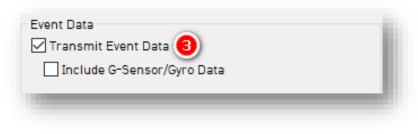
Domain/Static IP and Port #	http://sv.smartwitness.co:5000/api
_	

Transmit

 Use HTTP posts from your CP2 to the server by checking Transmit Live Tracking Data. Livetrack2 contains GPS coordinates. LiveTrack3 does not.



3. To send event notifications and images to the server, check **Transmit Event Data.**



Server > Main

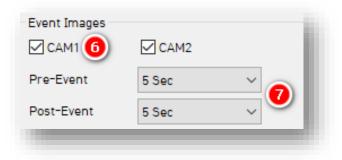
- 4. To send DRV data to the server, check **Transmit Telematics Data** (DRV).
- 5. Send emergency notifications like Ecall and over-temperature warnings to the server.

Note: The frequency interval of LiveTrack and DRV uploads is server controlled.

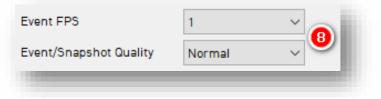
Telematics Data (DRV)	a (DRV) 🕙	
G-Sensor/Gyro Data	None	~
Data Type	Default	\sim
Emergency Call Transmit Emergency Call Transmit Temperature W		_

Event Images

- Choose which camera channels send event images to the server by clicking CAM1 and/or CAM2.
- To determine snapshot timing before and after an event, select a Pre-Event and Post-Event time.



8. Select image capture settings for **Event FPS** and **Snapshot Quality.**



Server > Triggered Event

4.6.2 Triggered Event Fields

Event Triggered By

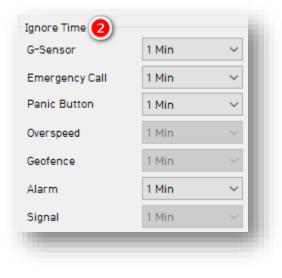
Select the events your device sends to the server. Events transmit instantly, even in "Continuous" record mode.

Note: SmartAPI Workstation event admin controls dictate what events and event notifications are sent from SmartAPI to our partner's servers

Event Triggered by		
G-Sensor	Emergency Call	
🗹 Transmit Image	✓ Transmit Image	
Panic Button	Geofence	
🗹 Transmit Image	Transmit Image	
Ignition	Overspeed	
Transmit Image	Transmit Image	
Alarm1	Alarm2	
🗹 Transmit Image	🗹 Transmit Image	
Signal1	Signal2	
🗹 Transmit Image	🗹 Transmit Image	
Signal3	Signal4	
🗹 Transmit Image	🗹 Transmit Image	

Ignore Time

2. Select an **Ignore Time** or the amount of time repeated events are ignored for event uploads to the server.



Complete Your Configuration

5 Finishing Up/Support

Goal: Finalize your configuration and access support

- 1. Click **Save** to set your finalized settings configuration.
- 2. Select **FHDRM** SD drive when prompted. Your configuration saves to your card.
- 3. Wait for confirmation that the software applied your settings configuration.
- 4. Click Eject SD Card, insert it into your CP2, and power on the device.
- 5. You have completed your configuration.

Note: Apply device configurations over the air from the SmartAPI Workstation. See the instructions <u>here</u>.

5.1 Support Information

If you need additional support or an expert to walk you through this process, please **register** and submit a ticket, or email us at **support@smartwitness.com**. If you are enrolled in SWAT, reach out to the integration team via Teams with any device configuration questions.

Feel free to call our support team:

North America, South America, APAC

+1 (312) 981 8774

EMEA

+44 (0) 1483 397005