SmartWitness CP2 / CP2-LTE

Device Configuration Guide

CP2 3G model

CP2 4G/LTE model

SMARTWITNESS

This is Video Telematics.

CP2 Setup and Configuration

1. Download the CP2 configuration tool here
2. Install and open the configuration tool:
    1. Insert SD Card into your PC (Max 128GB SD card supported)
    2. Click 'Initialize SD Card'
    3. Select the SD card from File Explorer
    4. Click "Start" to initialize
3. Apply your desired settings (or click "Open" to load existing settings)
4. Click "Save to apply to SD card
5. Eject Card safely from your PC

CLICK HERE FOR VIDEO DEMONSTRATION

*SD cards can also be removed from the CP2 to review video and data. For this, the SmartWitness PC viewer software is required which you can download here.

Device Tab

Camera
Enable main and secondary camera.

Power Connection
Specify the power source type.

- DPWR-600(S) is the standard power type for CP2.

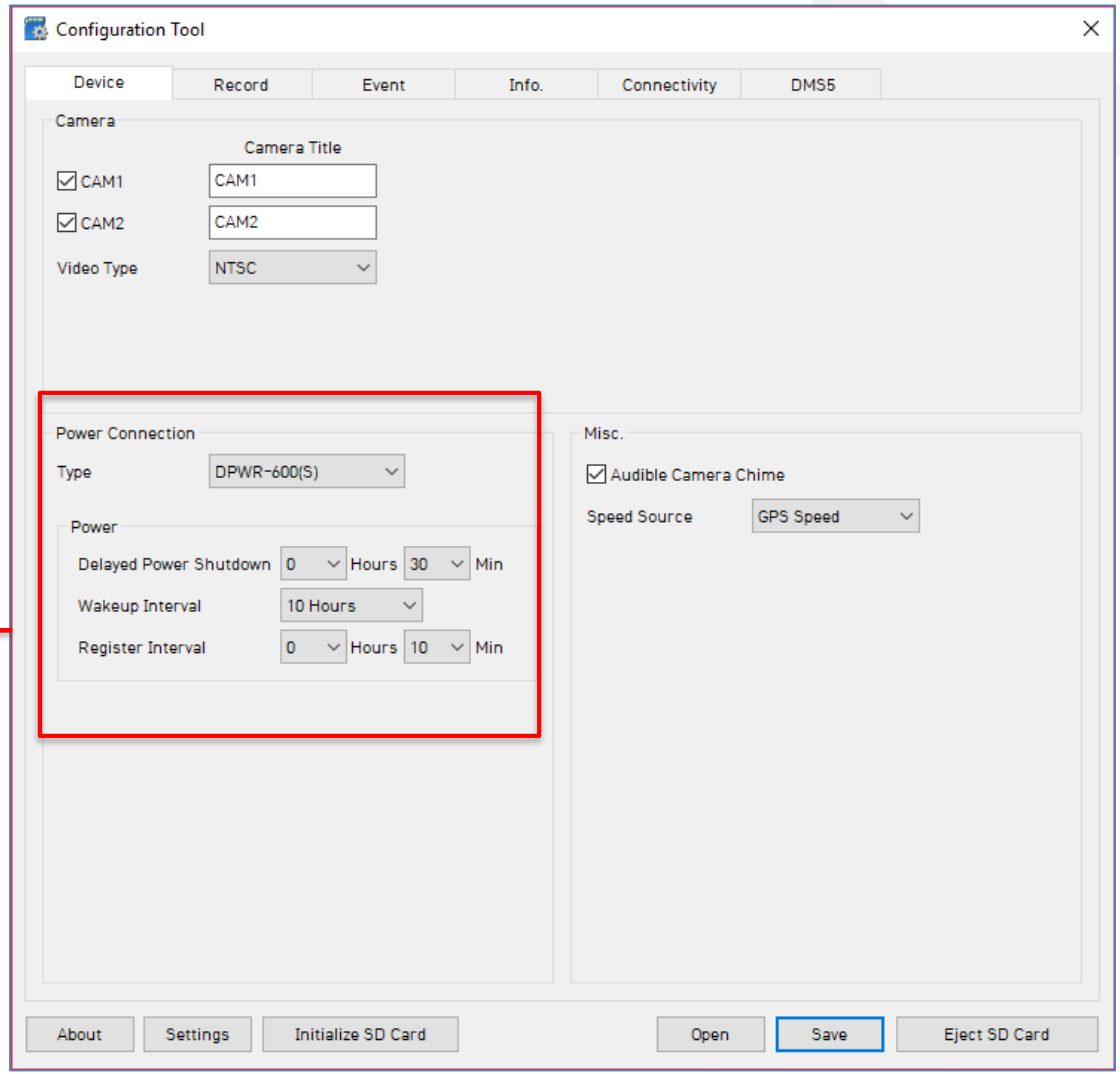
Delayed Power Shutdown: Amount of time CP2 stays powered on after ignition is turned off.

Wakeup Interval: Time interval in which the CP2 will automatically power up again after shutdown

Register Interval: How long the CP2 stays powered on during the wakeup interval.

Misc.

- Audible Camera Chime: turn audible alert on or off (audible alarms can be individually turned on/off per event).



Record Tab

Resolution: chose from VGA, HD (720p) or FHD (1080p)
*CH2 is limited to D1 only
Frame Rate: Choose from 30, 15, 10, 5, 4, 3, 2, or 1
Quality: Standard, High, or Super bitrare. (The lower the quality, the more lossy the video output).

Record Modes
Event: Only events are recorded, event video duration determined by the pre & post event setting.
Continuous: Records video continuously, no events (events can still be sent to Smart API server if configured on the Server tab).
Dual Mode: Records continuous at 1FPS + events at the specified FPS.
*If Dual Mode is set, you can adjust the SD card partition for event and continuous video by adjusting the slider setting left or right.

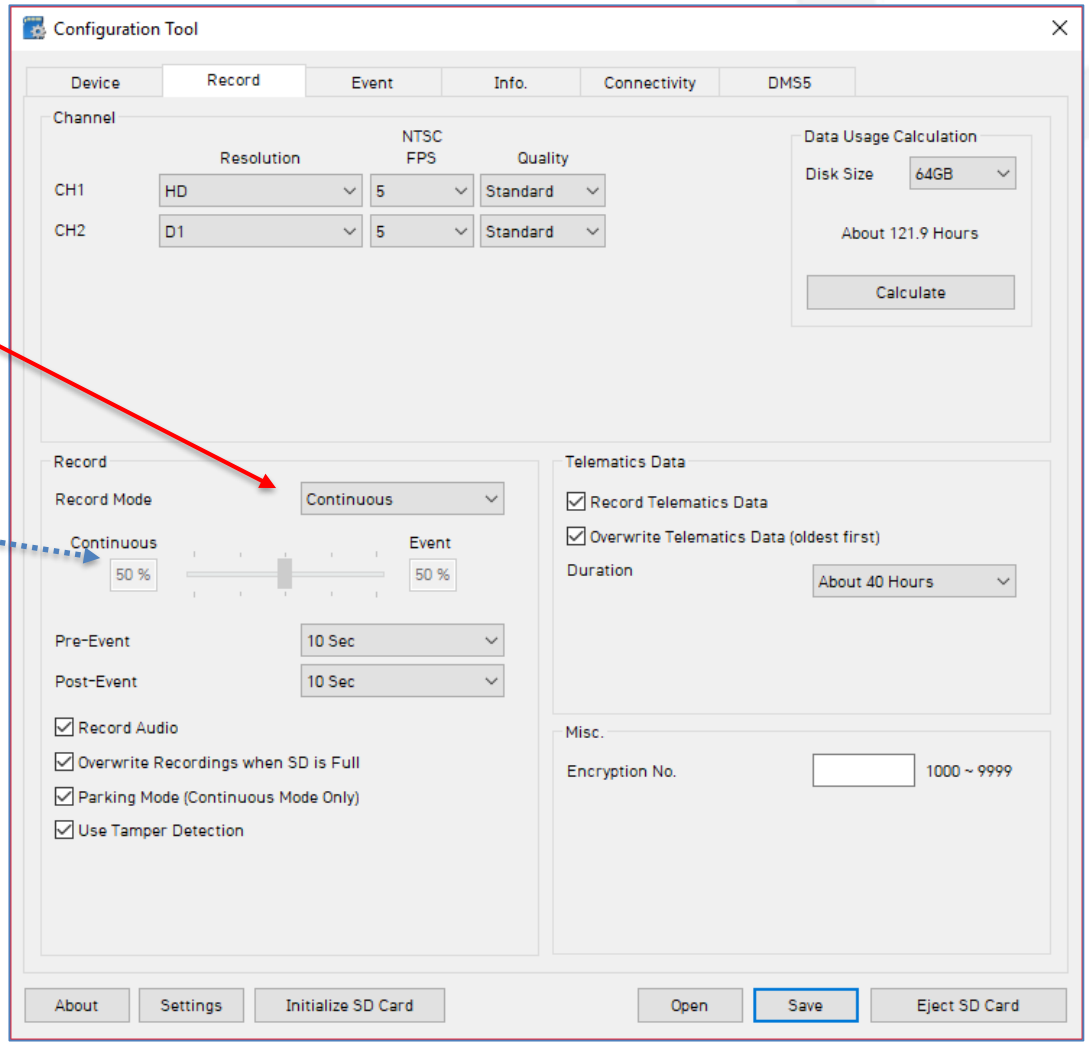
Telematics Data (DRV file) is recorded and stored separately from video and events. Set the local storage duration here.

Audio recording can be turned on or off

Parking Mode reduces the FPS to 1 when the vehicle is idle for 5 minutes (Continuous Mode option only)

Tamper Detection ensures that MDT files are not tampered/manipulated. When using SmartWitness PC software, any MDT file which is not an original MDT file will populate a warning. Tamper setting must also be enabled on the PC software

Encryption No. 4 digit passcode to protect the SD card data from being easily viewed with the Analysis software.



Event Tab – G Sensor

Events can be turned on/off per each camera channel (event mode and dual mode only).

"Beep" controls the audible chime in the vehicle

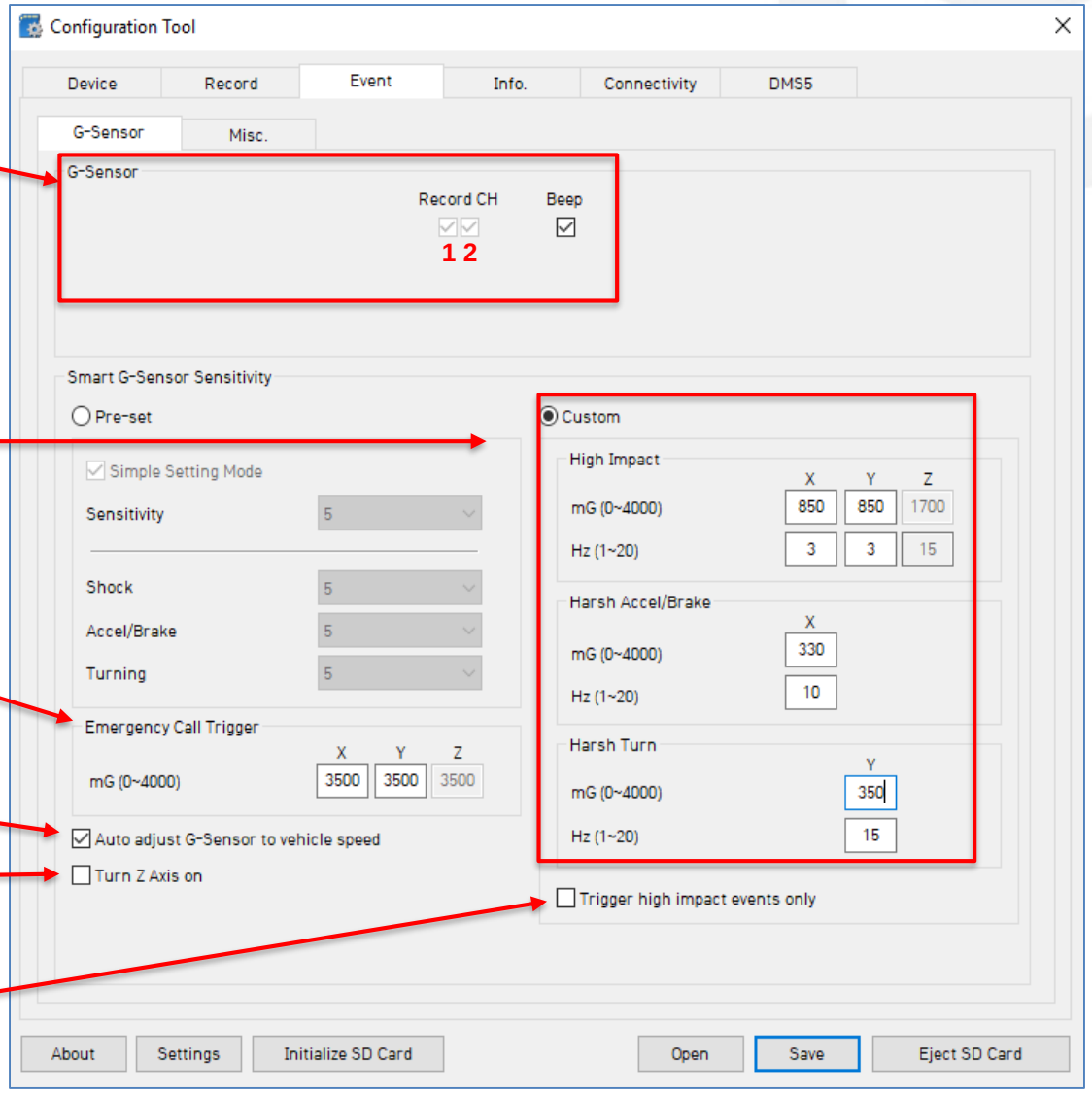
G-Sensor Sensitivity Settings.
X=Front/Rear
Y=Left/Right
Z= Up/Down
Hz= the amount of times in a row the G-Sensor level must be exceeded before trigger

Ecall is a severe impact G-Sensor which can be configured to send emergency notifications separately from lower level shock events.

Check this box to increase G-Sensor threshold at higher vehicle speeds.*

Z-Axis Can be turned off to ignore up/down axis triggers

When checked, only Ecall and Shock events will trigger (accel, brake, and turn events will be ignored)



Event Tab – MISC

The Event tab will allow you to specify which events will trigger a recording (Event record mode or Dual record mode only).

Check the boxes next to each event you want triggered.
You can also set speed thresholds here if you'd like to record over speed events. (This is raw vehicle speed and does not account for road/posted speed limits)

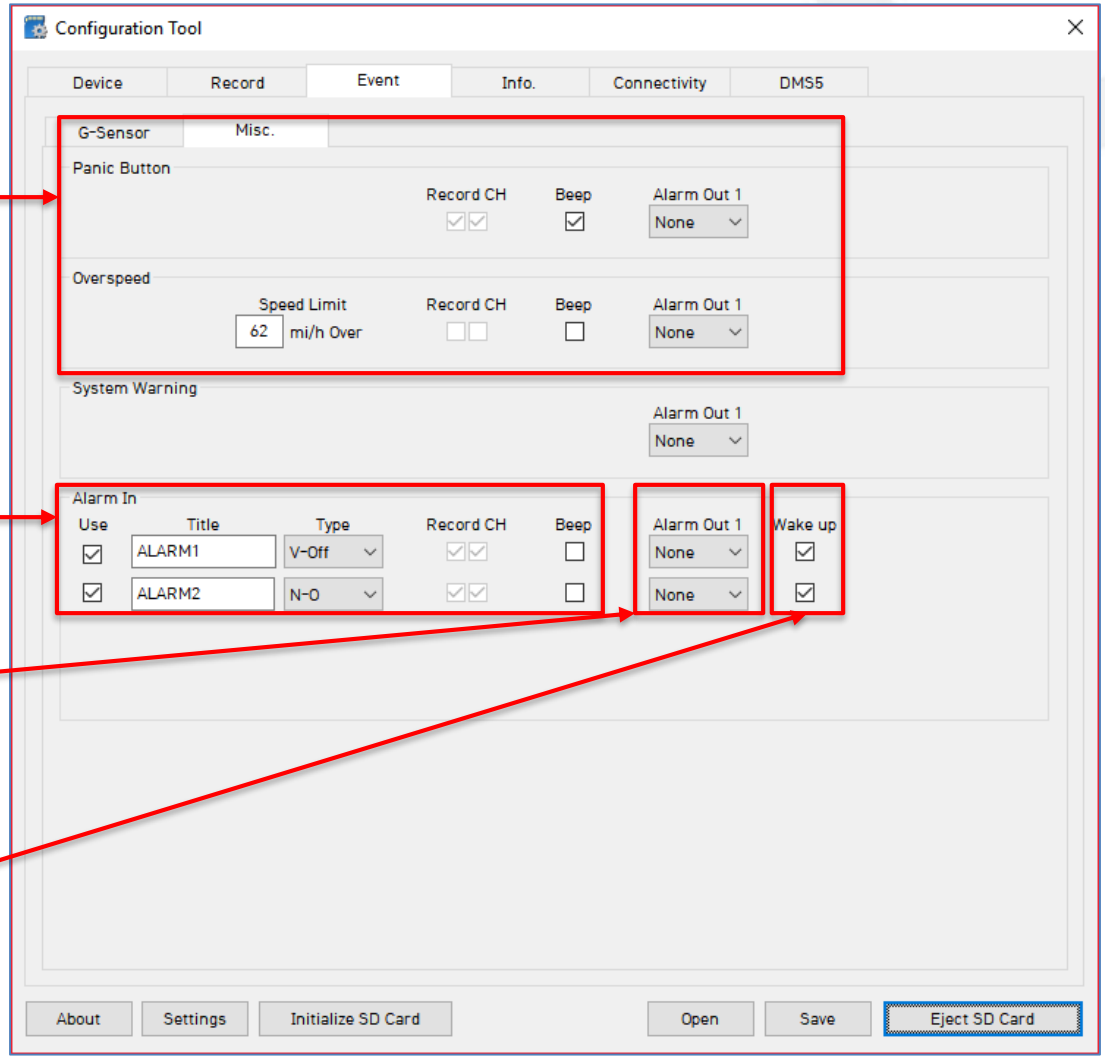
Check "Beep" if you'd like an audible chime to alert the driver when the event occurs

Alarm In: If using the optional alarm input triggers (Alarm1: orange wire, Alarm2: green wire) then you need to check the box(s) here and label them according to the input type (i.e. horn, lights, door open, etc.)

Also the input type should be selected (NC/NO, or 12V ON/OFF).

Alarm Out: if selected, will send a 5V output from the Yellow wire to a 3rd party device for the duration selected in the dropdown.

Wake Up: when enabled, the CP2 will power up when the Alarm Input is triggered.
(CP2 will stay online for the same amount of time set in the Register Interval setting).



Info Tab

Time setting is not necessary as the PC Viewer software and Smart API both adjust the standard UTC time to local time automatically.

DST (Optional)
Check the box to enable the daylight saving time.
Input the start & end date.

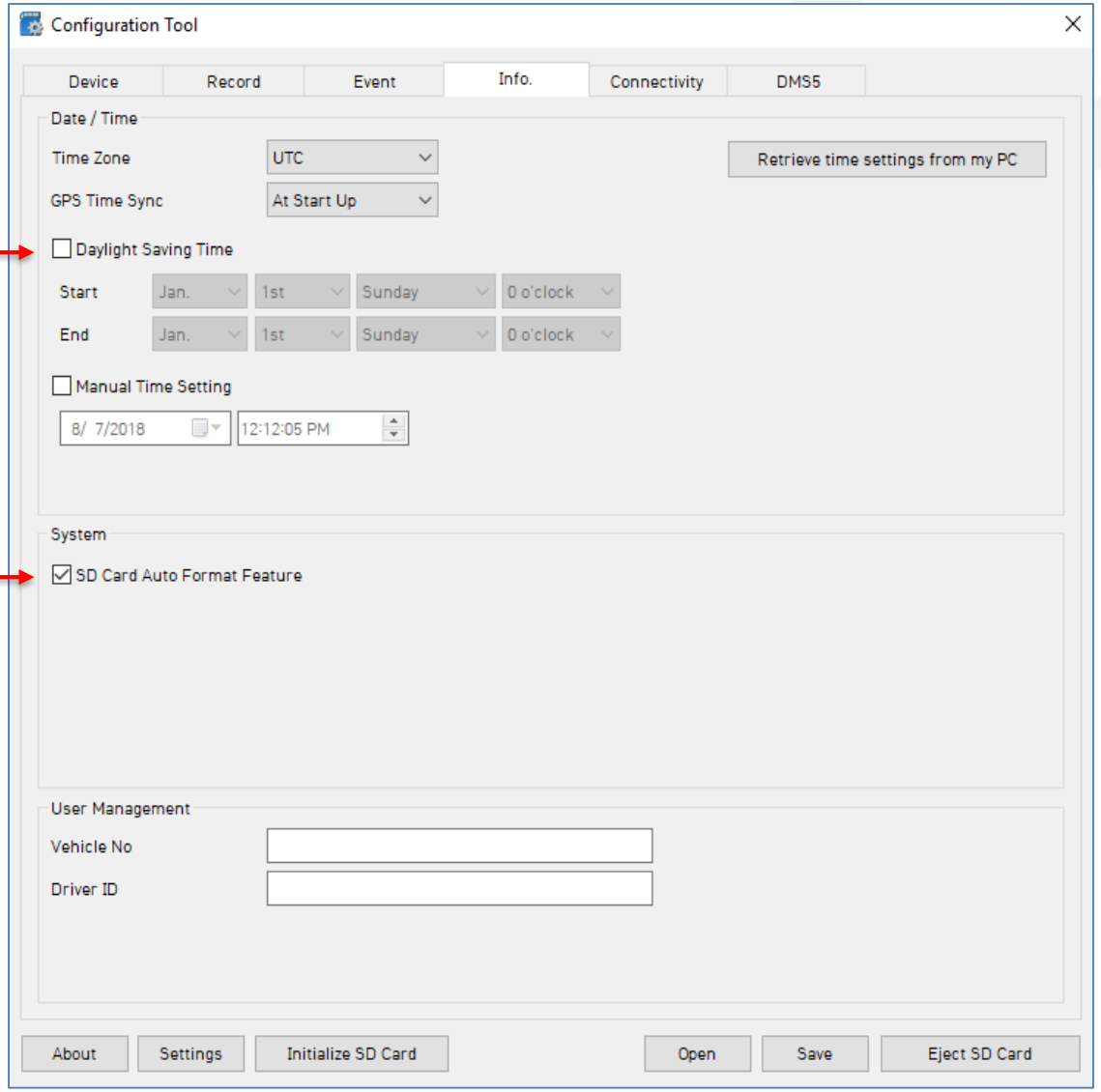
*DO NOT USE IF CP2 IS CONNECTED TO SMART API

SD Card auto format feature enables the CP2 to perform automatic maintenance on the SD cards when there is an issue. SD cards need to be re-formatted occasionally over time.

This unique feature reduces the administrative burden of managing SD card formatting amongst your fleet.

Note: SD card data will be deleted when an auto-format occurs.

Vehicle No & Driver ID can be added here. These values will be able to be watermarked on the MP4 converted video using the desktop analysis software (PC or MAC).



Connectivity Tab

When using CP2 as a connected device, "Enable" the connectivity here

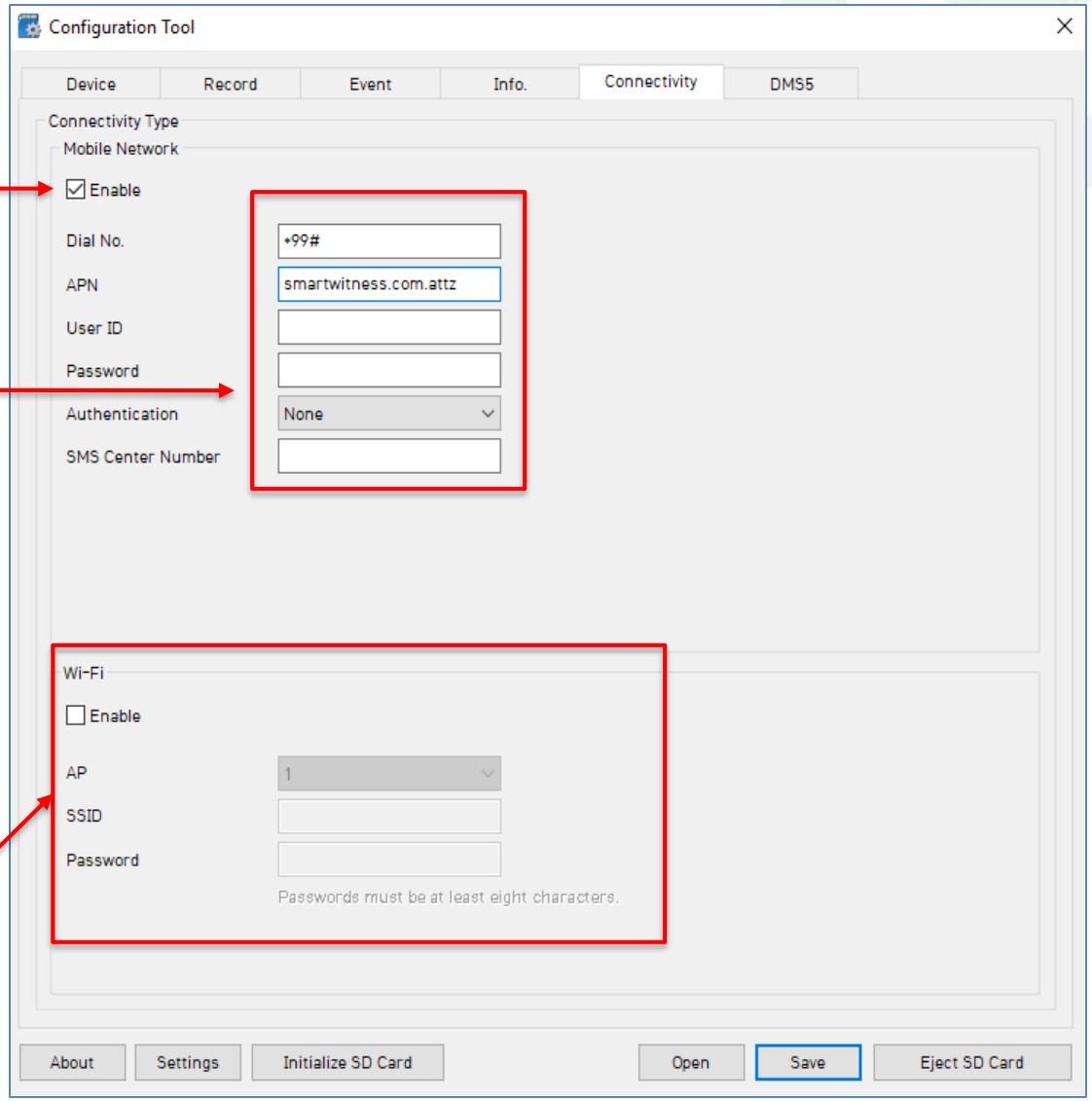
Add Mobile Network provider details here

If using SmartWitness SIM (AT&T), the APN should be as shown

If using SW UK (O2 Arkessa) below

WiFi: CP2 has built-in WiFi. You can enable WiFi connectivity instead of celluar connectivity. The AP must be secure with WPA/WPA2 encryption and have a password of at least 8 characters (cannot be an open network)

You can set up to 10 WiFi SSIDs. CP2 will scan for as many networks as are added here in its settings



Server Tab

SmartWitness or your service provider will provide you the URL and (if necessary) the License Key to enter here.

Transmit Live Tracking Data: Check to enable http posts from the CP2 to server. Livetrack2 contains GPS coordinates. LiveTrack3 does not.

Transmit Event Data: Check to enable CP2 posting event notification and images to the server.

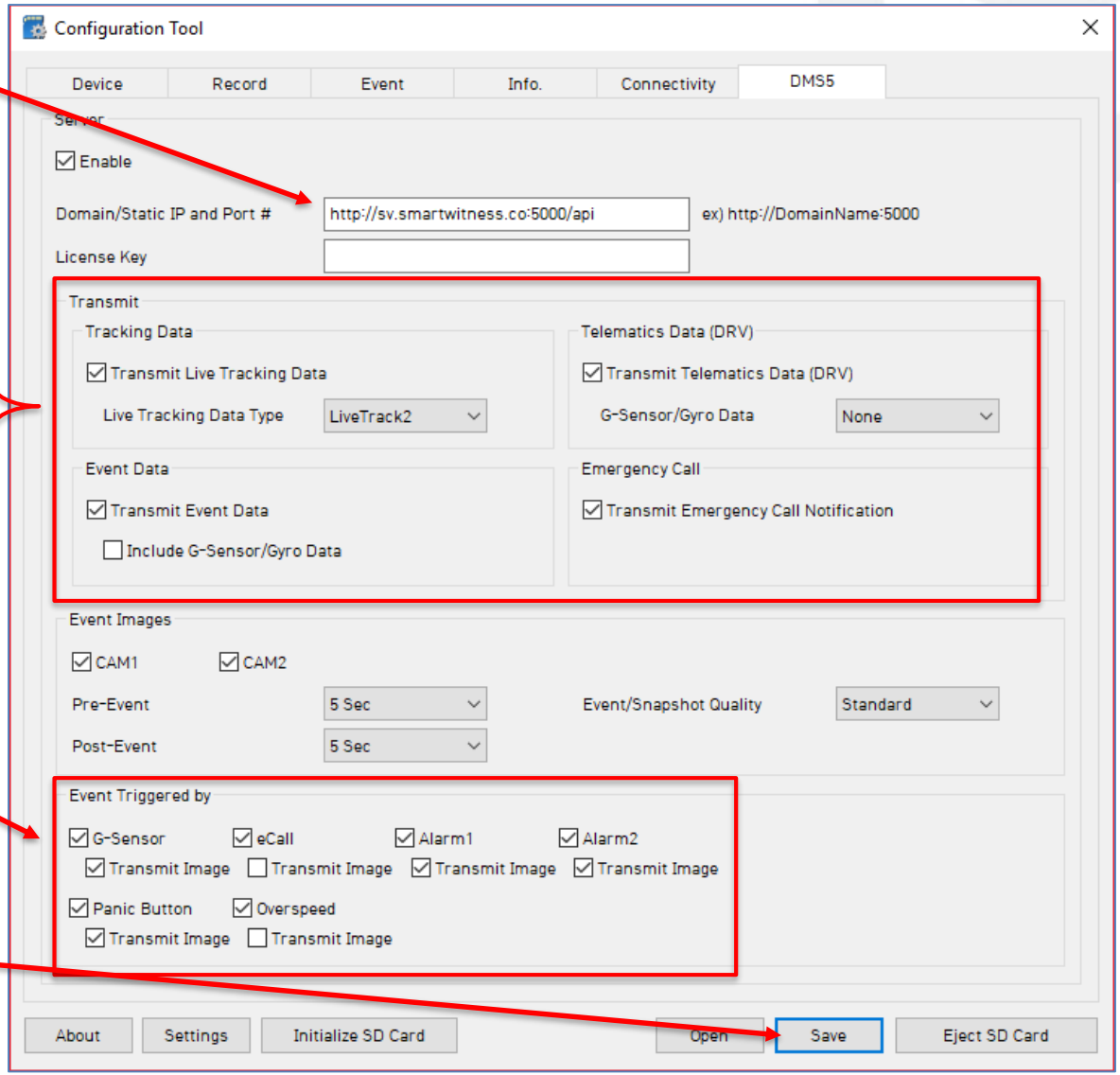
Transmit Telematics Data: Check to enable CP2 to send DRV data (static/compressed file containing drive data from every second the vehicle is in operation.

Note: The frequency interval of LiveTrack and DRV uploads are controlled by the server.

Select the events here which the CP2 will transmit to the server in real-time. These events will transmit instantly even if CP2 is set as "Continuous" record mode.

Click 'Save' and select the "FHDRM" SD drive when prompted. This will save your configuration to the card. Wait for the software to confirm the settings have been applied to the SD Card.

You can now eject the SD from your PC and insert into CP2 and power on.



CP2 G-Sensor Threshold Table

Low Speed Table

Level	axis	ACCSENX		ACCSENY				ACCSENZ	
		Impact		Sudden start/ sudden stop1		Sudden start/ sudden stop2		Quick Turn	
		G(mg)	Hz	G(mg)	Hz	G(mg)	Hz	G(mg)	Hz
1 (less sensitive)	X	950	1	450	8	500	5~7	-	-
	Y	950	1	-	-	-	-	350	15
	Z	1050	1	-	-	-	-	-	-
2	X	900	1	420	8	470	5~7	-	-
	Y	900	1	-	-	-	-	340	15
	Z	1000	1	-	-	-	-	-	-
3	X	850	1	390	8	440	5~7	-	-
	Y	850	1	-	-	-	-	320	15
	Z	950	1	-	-	-	-	-	-
4	X	800	1	360	8	410	5~7	-	-
	Y	800	1	-	-	-	-	310	15
	Z	900	1	-	-	-	-	-	-
5	X	750	1	330	8	380	5~7	-	-
	Y	750	1	-	-	-	-	300	20
	Z	850	1	-	-	-	-	-	-
6	X	700	1	310	8	360	5-7	-	-
	Y	700	1	-	-	-	-	280	20
	Z	800	1	-	-	-	-	-	-
7	X	650	1	240	10	-	-	-	-
	Y	650	1		-	-	-	230	20
	Z	750	1	-	-	-	-	-	-
8	X	600	1	190	10	-	-	-	-
	Y	600	1	-	-	-	-	190	15
	Z	700	1	-	-	-	-	-	-
9	X	550	1	170	10	-	-	-	-
	Y	550	1	-	-	-	-	170	15
	Z	650	1	-	-	-	-	-	-

High Speed Table

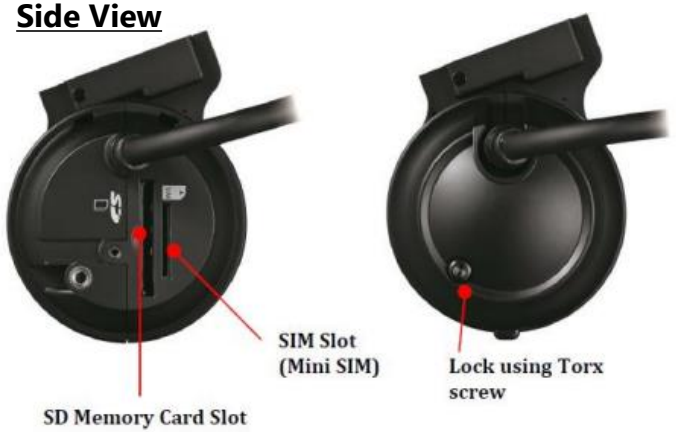
Level	axis	ACCSENX		ACCSENY				ACCSENZ	
		impact		Sudden start/ sudden stop1		Sudden start/ sudden stop2		Quick Turn	
		G(mg)	Hz	G(mg)	Hz	G(mg)	Hz	G(mg)	Hz
1 (less sensitive)	X	1350	1	480	10	-	-	-	-
	Y	1350	1	-	-	-	-	420	15
	Z	1450	1	-	-	-	-	-	-
2	X	1300	1	450	10	-	-	-	-
	Y	1300	1	-	-	-	-	410	15
	Z	1400	1	-	-	-	-	-	-
3	X	1250	1	420	10	-	-	-	-
	Y	1250	1	-	-	-	-	380	15
	Z	1350	1	-	-	-	-	-	-
4	X	1200	1	390	10	-	-	-	-
	Y	1200	1	-	-	-	-	370	15
	Z	1300	1	-	-	-	-	-	-
5	X	1150	1	360	10	-	-	-	-
	Y	1150	1	-	-	-	-	340	20
	Z	1250	1	-	-	-	-	-	-
6	X	1100	1	340	10	-	-	-	-
	Y	1100	1	-	-	-	-	320	20
	Z	1200	1	-	-	-	-	-	-
7	X	1050	1	270	10	-	-	-	-
	Y	1050	1		-	-	-	270	20
	Z	1150	1	-	-	-	-	-	-
8	X	1000	1	190	10	-	-	-	-
	Y	1000	1	-	-	-	-	220	15
	Z	1100	1	-	-	-	-	-	-
9	X	950	1	170	10	-	-	-	-
	Y	950	1	-	-	-	-	200	15
	Z	1050	1	-	-	-	-	-	-

Speed Mode: When auto adjust G-Sensor to vehicle speed is checked, G-Sensor threshold will increase to levels specified in the right table when the vehicle reaches 20 KMh. The threshold will go back to settings in the left table when vehicle goes below 10 KMh.

CP2 Hardware

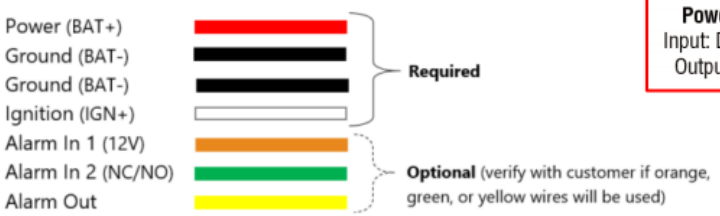
Front View

Side View



Rear View

Wiring Diagram & Power Specifications

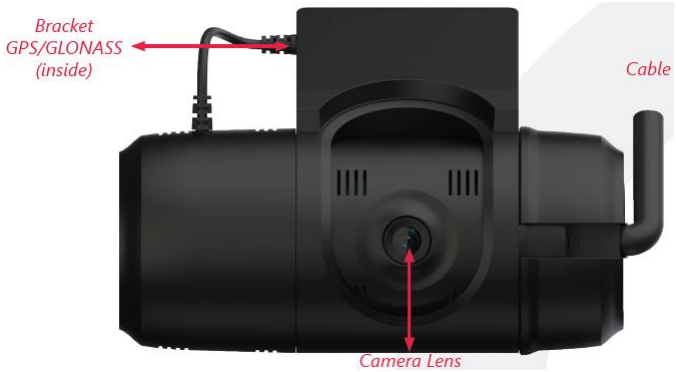


Power Specifications
Input: DC 10~32V, 2000mA
Output: DC5V, 2500mA

[CP2 Installation guide can be downloaded here]

CP2-LTE Hardware

Front View



Side View

Rear View

Wiring Diagram & Power Specifications

Power Specifications
Input: DC 10~32V, 2000mA
Output: DC5V, 2500mA

CP2-LTE Installation guide can be downloaded here

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