Template:FMM640 Crash Detection

Crash Detection

Scenario is activated when Crash is detected by device using acceleration values. Crash Detection functionality can be set according to these settings: 1. Threshold (mg) 2. Duration (ms) If accident happens and FMM640 detects acceleration value higher than set threshold value during set time period, then device will generate an event. Threshold and duration values are set depending of accident power which you want to detect. FMM640 can detect a slight tapping on the device (Threshold=100mg, Duration=1ms) or can detect severe accident (Threshold=4000mg, Duration=5ms).

Crash trace functionality
Crash trace functionality collects accelerometer, GNSS data if configured. Collected data holds 10 seconds of information. Output data rate for crash trace is 50 Hz and it is not configurable
0. Disabled,
1. Trace Changes(Enable).

- FMM will collect acceleration data for configured trace duration. Every second Acceleration changed more then > 50mG Data will be collected and records generated. If Acceleration does not change, trace will save records with 1second period.

2. Trace Full.

- It doesnt matter if axis changed more then >50mG or not all values will be added in buffer.

Crash trace data structure
Data is packed different in Codec 8 and Codec 8E protocols.
Then CODEC8 is being used device will save IO records with 4 elements. Each sample will contain sample data. This means that 500 records will be created to reflect 10 s of data then ODR is 50 Hz.