

FMS Eco Driving Report Structure

IO Name	Record Structure
Event Type	Description 0 - Periodic 1 - Trip Start 2 - Trip End 3 - Driver change 4 - Device startup 5 - Device off / reset 6 - End of Day 7 - VIN Change 0 - Ignition Off 1 - Ignition On Trip Odometer value Total Distance IO element indicates measured vehicle total traveled distance. Accumulated amount of fuel used during vehicle operation. Driver ID number Vehicle identification number Number of events 1. Fuel rate below X or Engine torque below X 2. Brake switches off (brakes are not currently in use) 3. Vehicle speed above X km/h 4. Cruise control is not detected to be enabled (OFF) Accumulated amount of fuel used during Coasting event. Time of how long the event lasted 1. Fuel rate below X or Engine torque below X 2. Brake switches off (brakes are not currently in use) 3. Vehicle speed above X km/h. 4. Cruise control is not detected to be enabled (OFF) 5. Neutral gear detected Accumulated amount of fuel used during EcoRoll event. Time of how long the event lasted Brake pedal is used Accumulated amount of fuel used during Braking event. Time of how long the event lasted Amount of brakes Retarder braking detected from FMS parameter Accumulated amount of fuel used during Retarder event. Time of how long the event lasted Cruise control is detected to be is used Accumulated amount of fuel used during Cruise event. Time of how long the event lasted Distance counted from configured X acceleration pedal position level Accumulated amount of fuel used during Torque event. Time of how long the event lasted Distance counted on PTO event. Accumulated amount of fuel used during PTO event. Time of how long the event lasted 1. Speed > 0km/h is detected 2. Fuel consumption parameter is received 3. Ignition ON 1. Speed = 0km/h is detected 2. Fuel consumption parameter is received 3. Ignition ON 1.Engine load percentage will be configurable parameter X% 2.Speed > 0km/h is detected 3.Fuel consumption parameter is received 4.Ignition ON 5.Engine load parameter >X is detected Total distance count Total Fuel used count Total time of how long the events lasted Total Short stops count Total Long stops count
Ignition	
Trip	
Total Distance	
Engine Fuel used	
Active Driver ID	
VIN Number	
Event Counter	
Coasting Distance	
Coasting Fuel used	
Coasting Time	
EcoRoll Distance	
EcoRoll Fuel used	
EcoRoll Time	
Braking Distance	
Braking Fuel used	
Braking Time	
Braking Count	
Retarder Distance	
Retarder Fuel used	
Retarder Time	
Cruise Distance	
Cruise Fuel used	
Cruise Time	
Torque Distance	
Torque Fuel used	
Torque Time	
PTO Distance	
PTO Fuel used	
PTO Time	
Fuel While Driving	
Fuel While Idle	
Engine Load fuel	
Total Distance	
Total Fuel used	
Total Time	
Short Stops Count	
Long Stops Count	
Speed Range 1 Distance	
Speed Range 2 Distance	
Speed Range 3 Distance	
Speed Range 4 Distance	
Speed Range 5 Distance	
Speed Range 6 Distance	
Speed Range 7 Distance	
Speed Range 8 Distance	
Speed Range 9 Distance	
Speed Range 10 Distance	
Speed Range 1 Fuel used	
Speed Range 2 Fuel used	
Speed Range 3 Fuel used	
Speed Range 4 Fuel used	
Speed Range 5 Fuel used	
Speed Range 6 Fuel used	
Speed Range 7 Fuel used	
Speed Range 8 Fuel used	
Speed Range 9 Fuel used	
Speed Range 10 Fuel used	
Speed Range 1 Time	
Speed Range 2 Time	
Speed Range 3 Time	
Speed Range 4 Time	
Speed Range 5 Time	
Speed Range 6 Time	
Speed Range 7 Time	
Speed Range 8 Time	
Speed Range 9 Time	
Speed Range 10 Time	
RPM Range 1 Distance	
RPM Range 2 Distance	
RPM Range 3 Distance	
RPM Range 4 Distance	
RPM Range 5 Distance	
RPM Range 6 Distance	
RPM Range 7 Distance	
RPM Range 8 Distance	
RPM Range 9 Distance	
RPM Range 10 Distance	
RPM Range 1 Fuel used	
RPM Range 2 Fuel used	
RPM Range 3 Fuel used	
RPM Range 4 Fuel used	
RPM Range 5 Fuel used	
RPM Range 6 Fuel used	
RPM Range 7 Fuel used	
RPM Range 8 Fuel used	
RPM Range 9 Fuel used	
RPM Range 10 Fuel used	
RPM Range 1 Time	
RPM Range 2 Time	
RPM Range 3 Time	
RPM Range 4 Time	
RPM Range 5 Time	
RPM Range 6 Time	
RPM Range 7 Time	
RPM Range 8 Time	
RPM Range 9 Time	
RPM Range 10 Time	
Torque Range 1 Distance	
Torque Range 2 Distance	
Torque Range 3 Distance	
Torque Range 4 Distance	
Torque Range 5 Distance	
Torque Range 6 Distance	
Torque Range 7 Distance	
Torque Range 8 Distance	
Torque Range 9 Distance	
Torque Range 10 Distance	
Torque Range 1 Fuel used	
Torque Range 2 Fuel used	
Torque Range 3 Fuel used	
Torque Range 4 Fuel used	
Torque Range 5 Fuel used	
Torque Range 6 Fuel used	
Torque Range 7 Fuel used	
Torque Range 8 Fuel used	
Torque Range 9 Fuel used	
Torque Range 10 Fuel used	
Torque Range 1 Time	
Torque Range 2 Time	
Torque Range 3 Time	
Torque Range 4 Time	
Torque Range 5 Time	
Torque Range 6 Time	
Torque Range 7 Time	
Torque Range 8 Time	
Torque Range 9 Time	
Torque Range 10 Time	
Braking Range 1 Distance	
Braking Range 2 Distance	
Braking Range 3 Distance	
Braking Range 4 Distance	
Braking Range 5 Distance	
Braking Range 6 Distance	
Braking Range 7 Distance	
Braking Range 8 Distance	
Braking Range 9 Distance	
Braking Range 10 Distance	
Braking Range 1 Fuel used	
Braking Range 2 Fuel used	
Braking Range 3 Fuel used	
Braking Range 4 Fuel used	
Braking Range 5 Fuel used	
Braking Range 6 Fuel used	
Braking Range 7 Fuel used	
Braking Range 8 Fuel used	
Braking Range 9 Fuel used	
Braking Range 10 Fuel used	

FMS Eco Driving parsed example

Unparsed data

00000000	000001F3	8E	01	00000186B6204915	00	0F0E8788	209ADC40	007B	0027	11	0000	2EE0
0023	0000	0000	0023	2F65	00000000	2F66	00000000	2F67	00000000	2F68	00000000	2F69
00000000	2F6A	00000000	2F6B	00000000	2F6C	00000000	2F6D	00000000	2F6E	00000000	2F6F	
00000000	2F70	00000000	2F71	00000000	2F72	00000000	2F73	00000000	2F74	00000000	2F75	
00000000	2F76	00000000	2F77	00000000	2F78	00000000	2F79	00000000	2F7A	00000000	2F7B	
00000000	2F7C	00000000	2F7D	00000000	2F7E	00000000	2F7F	00000000	2F80	00000000	2F81	
00000000	2F82	00000000	2F83	00000000	2F84	00000000	2F85	00000000	2F86	00000000	2F87	
				00000000	0000	0000	01	0000CE87				

Parsed data

Parsed Beacon data part	HEX Code Part
Zero Bytes	00 00 00 00
Data Field Length	00 00 01 F3
Codec ID	8E
Number of Data 1 (Records)	01
Timestamp	00 00 01 86 B6 20 49 15
Priority	00
Longitude	0F 0E 87 88
Latitude	20 9A DC 40
Altitude	00 7B
Angle	00 27
Satellites	11
Speed	00 00
Event Type	2E E0 (AVL ID: 12000)
Number of total ID's	00 23
Number of One Byte IO ID's	00 00
Number of Two Bytes IO ID's	00 00
Number of Four Bytes IO ID's	00 23
RPM Range 4 Distance	2F 65 (AVL ID: 12133)
RPM Range 4 Distance Value	00 00 00 00
RPM Range 5 Distance	2F 66 (AVL ID: 12134)
RPM Range 5 Distance Value	00 00 00 00
RPM Range 6 Distance	2F 67 (AVL ID: 12135)
RPM Range 6 Distance Value	00 00 00 00
RPM Range 7 Distance	2F 68 (AVL ID: 12136)
RPM Range 7 Distance Value	00 00 00 00
RPM Range 8 Distance	2F 69 (AVL ID: 12137)
RPM Range 8 Distance Value	00 00 00 00
RPM Range 9 Distance	2F 6A (AVL ID: 12138)
RPM Range 9 Distance Value	00 00 00 00
RPM Range 10 Distance	2F 6B (AVL ID: 12139)
RPM Range 10 Distance Value	00 00 00 00
RPM Range 1 Fuel used	2F 6C (AVL ID: 12140)
RPM Range 1 Fuel used Value	00 00 00 00
RPM Range 2 Fuel used	2F 6D (AVL ID: 12141)
RPM Range 2 Fuel used Value	00 00 00 00
RPM Range 3 Fuel used	2F 6E (AVL ID: 12142)
RPM Range 3 Fuel used Value	00 00 00 00
RPM Range 4 Fuel used	2F 6F (AVL ID: 12143)
RPM Range 4 Fuel used Value	00 00 00 00
RPM Range 5 Fuel used	2F 70 (AVL ID: 12144)
RPM Range 5 Fuel used Value	00 00 00 00
RPM Range 6 Fuel used	2F 71 (AVL ID: 12145)
RPM Range 6 Fuel used Value	00 00 00 00
RPM Range 7 Fuel used	2F 72 (AVL ID: 12146)
RPM Range 7 Fuel used Value	00 00 00 00
RPM Range 8 Fuel used	2F 73 (AVL ID: 12147)
RPM Range 8 Fuel used Value	00 00 00 00
RPM Range 9 Fuel used	2F 74 (AVL ID: 12148)
RPM Range 9 Fuel used Value	00 00 00 00
RPM Range 10 Fuel used	2F 75 (AVL ID: 12149)
RPM Range 10 Fuel used Value	00 00 00 00
RPM Range 1 Time	2F 76 (AVL ID: 12150)
RPM Range 1 Time Value	00 00 00 00
RPM Range 2 Time	2F 77 (AVL ID: 12151)
RPM Range 2 Time Value	00 00 00 00
RPM Range 3 Time	2F 78 (AVL ID: 12152)
RPM Range 3 Time Value	00 00 00 00
RPM Range 4 Time	2F 79 (AVL ID: 12153)
RPM Range 4 Time Value	00 00 00 00
RPM Range 5 Time	2F 7A (AVL ID: 12154)

