

FMC640 Teltonika Data Sending Parameters ID

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Permanent I/O elements

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
239	Ignition	1	Unsigned	0	1	-	-	0 - Ignition Off 1 - Ignition On	FMB640 FMC640 FMM640	Permanent I/O elements
240	Movement	1	Unsigned	0	1	-	-	0 - Movement Off 1 - Movement On	FMB640 FMC640 FMM640	Permanent I/O elements
22	Data Mode	1	Unsigned	0	5	-	-	0 - Home On Stop 1 - Home On Moving 2 - Roaming On Stop 3 - Roaming On Moving 4 - Unknown On Stop 5 - Unknown On Moving	FMB640 FMC640 FMM640	Permanent I/O elements
21	GSM Signal	1	Unsigned	0	5	-	-	Value in range 1-5	FMB640 FMC640 FMM640	Permanent I/O elements
200	Sleep Mode	1	Unsigned	0	3	-	-	0 - No Sleep 1 - GPS Sleep 2 - Deep Sleep 3 - Online Deep Sleep	FMB640 FMC640 FMM640	Permanent I/O elements
71	GNSS Status	1	Unsigned	0	5	-	-	0 - GNSS OFF 1 - GNSS ON, no GPS antenna 2 - GNSS ON, without fix 3 - GNSS ON, with fix 4 - GNSS SLEEP 5 - GNSS Overcurrent/protect state	FMB640 FMC640 FMM640	Permanent I/O elements
181	GNSS PDOP	2	Unsigned	0	500	0.1	-	Probability	FMB640 FMC640 FMM640	Permanent I/O elements
182	GNSS HDOP	2	Unsigned	0	500	0.1	-	Probability	FMB640 FMC640 FMM640	Permanent I/O elements
66	External Voltage	2	Unsigned	0	30000	0,001	mV	Voltage, mV	FMB640 FMC640 FMM640	Permanent I/O elements
24	Speed	2	Unsigned	0	350	-	km/h	Value, km/h	FMB640 FMC640 FMM640	Permanent I/O elements
205	GSM Cell ID	4	Unsigned	0	4294967295	-	-	GSM base station ID	FMB640 FMC640 FMM640	Permanent I/O elements
206	GSM Area Code	2	Unsigned	0	65535	-	-	Location Area code (LAC), it depends on GSM operator. It provides unique number which assigned to a set of base GSM stations.	FMB640 FMC640 FMM640	Permanent I/O elements
67	Battery Voltage	2	Unsigned	0	30000	0,001	mV	Voltage, mV	FMB640 FMC640 FMM640	Permanent I/O elements
68	Battery Current	2	Unsigned	0	2400	-	mA	Current, mA	FMB640 FMC640 FMM640	Permanent I/O elements
241	Active GSM Operator	4	Unsigned	0	4294967295	-	-	Currently used GSM Operator code	FMB640 FMC640 FMM640	Permanent I/O elements
199	Trip Odometer	4	Unsigned	0	4294967295	-	m	Trip Odometer value in meters	FMB640 FMC640 FMM640	Permanent I/O elements

216	Total Odometer	4	Unsigned	0	4294967295	-	m	Total Odometer value in meters	FMB640 EMC640 EMM640	Permanent I/O elements
1	Digital Input 1	1	Unsigned	0	1	-	-	Logic: 0/1	FMB640 EMC640 EMM640	Permanent I/O elements
9	Analog Input 1	2	Unsigned	0	30000	0,001	V	Voltage, V	FMB640 EMC640 EMM640	Permanent I/O elements
179	Digital Output 1	1	Unsigned	0	1	-	-	Logic: 0/1	FMB640 EMC640 EMM640	Permanent I/O elements
236	Axis X	2	Signed	-8000	8000	-	mG	X axis value, mG	FMB640 EMC640 EMM640	Permanent I/O elements
237	Axis Y	2	Signed	-8000	8000	-	mG	Y axis value, mG	FMB640 EMC640 EMM640	Permanent I/O elements
238	Axis Z	2	Signed	-8000	8000	-	mG	Z axis value, mG	FMB640 EMC640 EMM640	Permanent I/O elements
219	CCID Part1	8	Unsigned	0	0xffffffff	-	-	Value of SIM ICCID	FMB640 EMC640 EMM640	Permanent I/O elements
220	CCID Part2	8	Unsigned	0	0xffffffff	-	-	Value of SIM ICCID	FMB640 EMC640 EMM640	Permanent I/O elements
221	CCID Part3	8	Unsigned	0	0xffffffff	-	-	Value of SIM ICCID	FMB640 EMC640 EMM640	Permanent I/O elements
144	SD Status	1	Unsigned	0	1	-	-	Logic: 0 - not present, 1 - present	FMB640 EMC640 EMM640	Permanent I/O elements
2	Digital Input 2	1	Unsigned	0	1	-	-	Logic: 0/1	FMB640 EMC640 EMM640	Permanent I/O elements
3	Digital Input 3	1	Unsigned	0	1	-	-	Logic: 0/1	FMB640 EMC640 EMM640	Permanent I/O elements
10	Analog Input 2	2	Unsigned	0	30000	0,001	V	Voltage, V	FMB640 EMC640 EMM640	Permanent I/O elements
180	Digital Output 2	1	Unsigned	0	1	-	-	Logic: 0/1	FMB640 EMC640 EMM640	Permanent I/O elements
72	Dallas Temperature 1	2	Signed	-550	1150	0,1	°C	Degrees (°C), -55 - +115, if 850 - Sensor not ready if 2000 - Value read error if 3000 - Not connected if 4000 - ID failed if 5000 - same as 850	FMB640 EMC640 EMM640	Permanent I/O elements
73	Dallas Temperature 2	2	Signed	-550	1150	0,1	°C	Degrees (°C), -55 - +115, if 850 - Sensor not ready if 2000 - Value read error if 3000 - Not connected if 4000 - ID failed if 5000 - same as 850	FMB640 EMC640 EMM640	Permanent I/O elements
74	Dallas Temperature 3	2	Signed	-550	1150	0,1	°C	Degrees (°C), -55 - +115, if 850 - Sensor not ready if 2000 - Value read error if 3000 - Not connected if 4000 - ID failed if 5000 - same as 850	FMB640 EMC640 EMM640	Permanent I/O elements
75	Dallas Temperature 4	2	Signed	-550	1150	0,1	°C	Degrees (°C), -55 - +115, if 850 - Sensor not ready if 2000 - Value read error if 3000 - Not connected if 4000 - ID failed if 5000 - same as 850	FMB640 EMC640 EMM640	Permanent I/O elements
62	Dallas Temperature ID 1	8	Unsigned	0	0xffffffff	-	-	Dallas sensor ID	FMB640 EMC640 EMM640	Permanent I/O elements
63	Dallas Temperature ID 2	8	Unsigned	0	0xffffffff	-	-	Dallas sensor ID	FMB640 EMC640 EMM640	Permanent I/O elements
64	Dallas Temperature ID 3	8	Unsigned	0	0xffffffff	-	-	Dallas sensor ID	FMB640 EMC640 EMM640	Permanent I/O elements
65	Dallas Temperature ID 4	8	Unsigned	0	0xffffffff	-	-	Dallas sensor ID	FMB640 EMC640 EMM640	Permanent I/O elements
78	iButton	8	Unsigned	0	0xffffffff	-	-	iButton ID	FMB640 EMC640 EMM640	Permanent I/O elements
76	Fuel Counter	4	Unsigned	0	4294967295	-	-	Number of impulses on selected input or difference between impulses on 2 lines Read more about impulse counters here	FMB640 EMC640 EMM640	Permanent I/O elements
10640	Impulse counter frequency 1	4	Unsigned	0	4294967295	-	Hz	Impulse frequency of the selected input	FMB640 EMC640 EMM640	Permanent I/O elements
10641	Impulse counter RPM 1	4	Unsigned	0	4294967295	-	RPM	Impulse RPM of the selected input	FMB640 EMC640 EMM640	Permanent I/O elements
483	Impulse Counter 2	4	Unsigned	0	4294967295	-	-	Number of impulses on selected input	FMB640 EMC640 EMM640	Permanent I/O elements
10642	Impulse counter frequency 2	4	Unsigned	0	4294967295	-	Hz	Impulse frequency of the selected input	FMB640 EMC640 EMM640	Permanent I/O elements
10643	Impulse counter RPM 2	4	Unsigned	0	4294967295	-	RPM	Impulse RPM of the selected input	FMB640 EMC640 EMM640	Permanent I/O elements
10911	Impulse counter value 1	4	Unsigned	0	4294967295	-	-	Impulse count of the selected input	FMB640 EMC640 EMM640	Permanent I/O elements
10912	Impulse counter value 3	4	Unsigned	0	4294967295	-	-	Impulse count of the selected input	FMB640 EMC640 EMM640	Permanent I/O elements
10913	Impulse counter frequency 3	4	Unsigned	0	4294967295	-	Hz	Impulse frequency of the selected input	FMB640 EMC640 EMM640	Permanent I/O elements
10914	Impulse counter RPM 3	4	Unsigned	0	4294967295	-	rpm	Impulse RPM of the selected input	FMB640 EMC640 EMM640	Permanent I/O elements
10915	Impulse counter value 4	4	Unsigned	0	4294967295	-	-	Impulse count of the selected input	FMB640 EMC640 EMM640	Permanent I/O elements
10916	Impulse counter frequency 4	4	Unsigned	0	4294967295	-	Hz	Impulse frequency of the selected input	FMB640 EMC640 EMM640	Permanent I/O elements
10917	Impulse counter RPM 4	4	Unsigned	0	4294967295	-	rpm	Impulse RPM of the selected input	FMB640 EMC640 EMM640	Permanent I/O elements
207	RFID	8	Unsigned	0	0xffffffff	-	-	RFID ID	FMB640 EMC640 EMM640	Permanent I/O elements
201	LLS 1 Fuel Level	2	Signed	-4	32767	-	kVnts or ltr	Fuel level measured by LLS sensor via RS232 in kVnts or liters	FMB640 EMC640 EMM640	Permanent I/O elements
202	LLS 1 Temperature	1	Signed	-128	127	-	°C	Fuel temperature measured by LLS via RS232 in degrees Celsius	FMB640 EMC640 EMM640	Permanent I/O elements
203	LLS 2 Fuel Level	2	Signed	-4	32767	-	kVnts or ltr	Fuel level measured by LLS sensor via RS232 in kVnts or liters	FMB640 EMC640 EMM640	Permanent I/O elements
204	LLS 2 Temperature	1	Signed	-128	127	-	°C	Fuel temperature measured by LLS via RS232 in degrees Celsius	FMB640 EMC640 EMM640	Permanent I/O elements
210	LLS 3 Fuel Level	2	Signed	-4	32767	-	kVnts or ltr	Fuel level measured by LLS sensor via RS232 in kVnts or liters	FMB640 EMC640 EMM640	Permanent I/O elements
211	LLS 3 Temperature	1	Signed	-128	127	-	°C	Fuel temperature measured by LLS via RS232 in degrees Celsius	FMB640 EMC640 EMM640	Permanent I/O elements
212	LLS 4 Fuel Level	2	Signed	-4	32767	-	kVnts or ltr	Fuel level measured by LLS sensor via RS232 in kVnts or liters	FMB640 EMC640 EMM640	Permanent I/O elements

213	LLS 4 Temperature	1	Signed	-128	127	-	°C	Fuel temperature measured by LLS via RS232 in degrees Celsius	FMB640 EMC640 EMM640	Permanent I/O elements
214	LLS 5 Fuel Level	2	Signed	-4	32767	-	kvaunts or ltr	Fuel level measured by LLS sensor via RS232 in kvaunts or liters	FMB640 EMC640 EMM640	Permanent I/O elements
215	LLS 5 Temperature	1	Signed	-128	127	-	°C	Fuel temperature measured by LLS via RS232 in degrees Celsius	FMB640 EMC640 EMM640	Permanent I/O elements
178	Network Type	1	Unsigned	0	4	-	-	0 - 3G 1 - 2G 2 - 4G 3 - CAT M1 4 - CAT NB1	FMC640 EMM640	Permanent I/O elements
108	Number Of Records	2	Unsigned	0	65535	-	-	Record counter, counts records saved since startup.	FMC640 EMM640	Permanent I/O elements
4	Digital Input 4	1	Unsigned	0	1	-	-	Logic: 0/1	FMB640 EMC640 EMM640	Permanent I/O elements
50	Digital Output 3	1	Unsigned	0	1	-	-	Logic: 0/1	FMB640 EMC640 EMM640	Permanent I/O elements
51	Digital Output 4	1	Unsigned	0	1	-	-	Logic: 0/1	FMB640 EMC640 EMM640	Permanent I/O elements
11	Analog Input 3	2	Unsigned	0	30000	0,001	V	Voltage, V	FMB640 EMC640 EMM640	Permanent I/O elements
245	Analog Input 4	2	Unsigned	0	30000	0,001	V	Voltage, V	FMB640 EMC640 EMM640	Permanent I/O elements
70	PCB Temperature	2	Signed	-550	1150	0,1	°C	Degrees (°C)	FMB640 EMC640 EMM640	Permanent I/O elements
5	Dallas Temperature ID 5	8	Unsigned	0	0xffffffff	-	-	Dallas sensor ID	FMB640 EMC640 EMM640	Permanent I/O elements
6	Dallas Temperature 5	2	Signed	-550	1150	0,1	°C	Degrees (°C), -55 - +115, if 850 - Sensor not ready if 2000 - Value read error if 3000 - Not connected if 4000 - ID failed if 5000 - same as 850	FMB640 EMC640 EMM640	Permanent I/O elements
7	Dallas Temperature ID 6	8	Unsigned	0	0xffffffff	-	-	Dallas sensor ID	FMB640 EMC640 EMM640	Permanent I/O elements
8	Dallas Temperature 6	2	Signed	-550	1150	0,1	°C	Degrees (°C), -55 - +115, if 850 - Sensor not ready if 2000 - Value read error if 3000 - Not connected if 4000 - ID failed if 5000 - same as 850	FMB640 EMC640 EMM640	Permanent I/O elements
217	RFID COM2	8	Unsigned	0	0xffffffff	-	-	RFID ID on COM2	FMB640 EMC640 EMM640	Permanent I/O elements
218	IMSI	8	Unsigned	0	0xffffffff	-	-	International mobile subscriber identity	FMB640 EMC640 EMM640	Permanent I/O elements
224	Ultrasonic Fuel Level 1	2	Signed	-15	32767	0,1	mm		FMB640 EMC640 EMM640	Permanent I/O elements
225	Ultrasonic Fuel Level 2	2	Signed	-15	32767	0,1	mm		FMB640 EMC640 EMM640	Permanent I/O elements
208	Ultrasonic Software Status 1	1	Unsigned	0	255	-	-	0 - Software - Normal 1 - Software - The system has just started, output measurement value 2 - Software - Gas delay count 3 - Software - The measured value is invalid 4 - Software - The stationary state 5 - No data received for 50-60 seconds 9 - Software - a sudden drop 10 - Software - a sudden rise 11 - Software - delay time of the sudden drop 12 - Software - delay time of the sudden rise 13 - Software - The stationary state, maintain the liquid level height value outputs changed 15 - Software - A sudden drop/rise on an tilt	FMB640 EMC640 EMM640	Permanent I/O elements
209	Ultrasonic Software Status 2	1	Unsigned	0	255	-	-	Values are identical to Ultrasonic Software Status 1	FMB640 EMC640 EMM640	Permanent I/O elements
10009	Eco score	2	Unsigned	0	65535	0,01	-	Average amount of events on some distance	FMB640 EMC640 EMM640	Permanent I/O elements
10487	1Wire Humidity 1	1	Unsigned	0	0xFF	-	%	1Wire Humidity 1	FMB640 EMC640 EMM640	Permanent I/O elements
10488	1Wire Humidity 2	1	Unsigned	0	0xFF	-	%	1Wire Humidity 2	FMB640 EMC640 EMM640	Permanent I/O elements
10489	1Wire Humidity 3	1	Unsigned	0	0xFF	-	%	1Wire Humidity 3	FMB640 EMC640 EMM640	Permanent I/O elements
10490	1Wire Humidity 4	1	Unsigned	0	0xFF	-	%	1Wire Humidity 4	FMB640 EMC640 EMM640	Permanent I/O elements
10491	1Wire Humidity 5	1	Unsigned	0	0xFF	-	%	1Wire Humidity 5	FMB640 EMC640 EMM640	Permanent I/O elements
10492	1Wire Humidity 6	1	Unsigned	0	0xFF	-	%	1Wire Humidity 1	FMB640 EMC640 EMM640	Permanent I/O elements
701	BLE 1 Temperature	2	Signed	-400	1250	0,1	°C	Degrees (°C), -40 - +125; Error codes: 4000 - abnormal sensor state 3000 - sensor not found 2000 - failed sensor data parsing	FMB640 EMC640 EMM640	Permanent I/O elements
702	BLE 2 Temperature	2	Signed	-400	1250	0,1	°C	Degrees (°C), -40 - +125; Error codes: 4000 - abnormal sensor state 3000 - sensor not found 2000 - failed sensor data parsing	FMB640 EMC640 EMM640	Permanent I/O elements
703	BLE 3 Temperature	2	Signed	-400	1250	0,1	°C	Degrees (°C), -40 - +125; Error codes: 4000 - abnormal sensor state 3000 - sensor not found 2000 - failed sensor data parsing	FMB640 EMC640 EMM640	Permanent I/O elements
704	BLE 4 Temperature	2	Signed	-400	1250	0,1	°C	Degrees (°C), -40 - +125; Error codes: 4000 - abnormal sensor state 3000 - sensor not found 2000 - failed sensor data parsing	FMB640 EMC640 EMM640	Permanent I/O elements
705	BLE 1 Battery Voltage	1	Unsigned	0	100	-	%	Battery voltage of sensor #1	FMB640 EMC640 EMM640	Permanent I/O elements
706	BLE 2 Battery Voltage	1	Unsigned	0	100	-	%	Battery voltage of sensor #2	FMB640 EMC640 EMM640	Permanent I/O elements
707	BLE 3 Battery Voltage	1	Unsigned	0	100	-	%	Battery voltage of sensor #3	FMB640 EMC640 EMM640	Permanent I/O elements
708	BLE 4 Battery Voltage	1	Unsigned	0	100	-	%	Battery voltage of sensor #4	FMB640 EMC640 EMM640	Permanent I/O elements
709	BLE 1 Humidity	2	Unsigned	0	1000	0,1	%RH	Humidity as measured by sensor	FMB640 EMC640 EMM640	Permanent I/O elements
710	BLE 2 Humidity	2	Unsigned	0	1000	0,1	%RH	Humidity as measured by sensor	FMB640 EMC640 EMM640	Permanent I/O elements
711	BLE 3 Humidity	2	Unsigned	0	1000	0,1	%RH	Humidity as measured by sensor	FMB640 EMC640 EMM640	Permanent I/O elements
712	BLE 4 Humidity	2	Unsigned	0	1000	0,1	%RH	Humidity as measured by sensor	FMB640 EMC640 EMM640	Permanent I/O elements
713	BLE Sensor Custom 1	8	Unsigned	0	0xffffffff	-	-	Raw data of 1st BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
714	BLE Sensor Custom 2	8	Unsigned	0	0xffffffff	-	-	Raw data of 2nd BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements

715	BLE Sensor Custom 3	8	Unsigned	0	0xffffffff	-	-	Raw data of 3rd BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
716	BLE Sensor Custom 4	8	Unsigned	0	0xffffffff	-	-	Raw data of 4th BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
717	BLE Illum1	2	Unsigned	0	0xffff	-	-	Luminosity value of a BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
718	BLE Illum2	2	Unsigned	0	0xffff	-	-	Luminosity value of a BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
719	BLE Illum3	2	Unsigned	0	0xffff	-	-	Luminosity value of a BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
720	BLE Illum4	2	Unsigned	0	0xffff	-	-	Luminosity value of a BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
721	BLE LLS Fuel 1	2	Unsigned	0	0xffff	-	-	Fuel Level	FMB640 EMC640 EMM640	Permanent I/O elements
722	BLE LLS Fuel 2	2	Unsigned	0	0xffff	-	-	Fuel Level	FMB640 EMC640 EMM640	Permanent I/O elements
723	BLE LLS Fuel 3	2	Unsigned	0	0xffff	-	-	Fuel Level	FMB640 EMC640 EMM640	Permanent I/O elements
724	BLE LLS Fuel 4	2	Unsigned	0	0xffff	-	-	Fuel Level	FMB640 EMC640 EMM640	Permanent I/O elements
725	BLE Freq 1	4	Unsigned	0	0xffffffff	-	-	Frequency value of BLE fuel sensor #1	FMB640 EMC640 EMM640	Permanent I/O elements
726	BLE Freq 2	4	Unsigned	0	0xffffffff	-	-	Frequency value of BLE fuel sensor #2	FMB640 EMC640 EMM640	Permanent I/O elements
727	BLE Freq 3	4	Unsigned	0	0xffffffff	-	-	Frequency value of BLE fuel sensor #3	FMB640 EMC640 EMM640	Permanent I/O elements
728	BLE Freq 4	4	Unsigned	0	0xffffffff	-	-	Frequency value of BLE fuel sensor #4	FMB640 EMC640 EMM640	Permanent I/O elements
729	BLE Sensor Custom 12	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
730	BLE Sensor Custom 13	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
731	BLE Sensor Custom 14	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
732	BLE Sensor Custom 15	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
733	BLE Sensor Custom 22	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
734	BLE Sensor Custom 23	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
735	BLE Sensor Custom 24	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
736	BLE Sensor Custom 25	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
737	BLE Sensor Custom 32	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
738	BLE Sensor Custom 33	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
739	BLE Sensor Custom 34	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
740	BLE Sensor Custom 35	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
741	BLE Sensor Custom 42	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
742	BLE Sensor Custom 43	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
743	BLE Sensor Custom 44	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements
744	BLE Sensor Custom 45	4	Unsigned	0	0xffffffff	-	-	Raw data of BLE sensor	FMB640 EMC640 EMM640	Permanent I/O elements

FMS elements

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
79	Brake Switch	1	Unsigned	0	1	-	-	0 - Pedal released 1 - Pedal pressed	FMB640 EMC640 EMM640	FMS elements
80	Wheel Based Speed	4	Unsigned	0	65536	-	km/h		FMB640 EMC640 EMM640	FMS elements
81	Cruise Control Active	1	Unsigned	0	1	-	-	0 - Switched off 1 - Switched on	FMB640 EMC640 EMM640	FMS elements
82	Clutch Switch	1	Unsigned	0	1	-	-	0 - Pedal released 1 - Pedal pressed	FMB640 EMC640 EMM640	FMS elements
83	PTO State	1	Unsigned	0	1	-	-	0 - Off/disabled 1 - Set 2 - Not available	FMB640 EMC640 EMM640	FMS elements
84	Acceleration Pedal Position	4	Unsigned	0	102	-	%		FMB640 EMC640 EMM640	FMS elements
85	Engine Current Load	1	Unsigned	0	125	-	%		FMB640 EMC640 EMM640	FMS elements
86	Engine Total Fuel Used	4	Unsigned	0	210540607	-	l	Value in liters, L	FMB640 EMC640 EMM640	FMS elements
87	Fuel Level	4	Unsigned	0	102	-	%		FMB640 EMC640 EMM640	FMS elements
88	Engine Speed	4	Unsigned	0	8032	-	rpm		FMB640 EMC640 EMM640	FMS elements
89	Axle weight 1	2	Unsigned	0	32766	-	kg		FMB640 EMC640 EMM640	FMS elements
90	Axle weight 2	2	Unsigned	0	32766	-	kg		FMB640 EMC640 EMM640	FMS elements
91	Axle weight 3	2	Unsigned	0	32766	-	kg		FMB640 EMC640 EMM640	FMS elements
92	Axle weight 4	2	Unsigned	0	32766	-	kg		FMB640 EMC640 EMM640	FMS elements

93	Axle weight 5	2	Unsigned	0	32766	-	kg	FMB640 FMC640 FMM640	FMS elements
94	Axle weight 6	2	Unsigned	0	32766	-	kg	FMB640 FMC640 FMM640	FMS elements
95	Axle weight 7	2	Unsigned	0	32766	-	kg	FMB640 FMC640 FMM640	FMS elements
96	Axle weight 8	2	Unsigned	0	32766	-	kg	FMB640 FMC640 FMM640	FMS elements
97	Axle weight 9	2	Unsigned	0	32766	-	kg	FMB640 FMC640 FMM640	FMS elements
98	Axle weight 10	2	Unsigned	0	32766	-	kg	FMB640 FMC640 FMM640	FMS elements
99	Axle weight 11	2	Unsigned	0	32766	-	kg	FMB640 FMC640 FMM640	FMS elements
100	Axle weight 12	2	Unsigned	0	32766	-	kg	FMB640 FMC640 FMM640	FMS elements
101	Axle weight 13	2	Unsigned	0	32766	-	kg	FMB640 FMC640 FMM640	FMS elements
102	Axle weight 14	2	Unsigned	0	32766	-	kg	FMB640 FMC640 FMM640	FMS elements
103	Axle weight 15	2	Unsigned	0	32766	-	kg	FMB640 FMC640 FMM640	FMS elements
104	Engine Total Hours Of Operation	4	Unsigned	0	214748364	-	h	FMB640 FMC640 FMM640	FMS elements
109	Software Version Supported	4	Unsigned	0	0xffffffff	-	-	Format: ab.cd ab = byte1 byte2 cd = byte3 byte4 FMB640 FMC640 FMM640	FMS elements
110	Diagnostics Supported	1	Unsigned	0	3	-	-	0 - Diagnostics is not supported 1 - Diagnostics is supported 2 - Reserved 3 - Do not care FMB640 FMC640 FMM640	FMS elements
111	Requests Supported	1	Unsigned	0	3	-	-	0 - Request is not supported 1 - Request is supported 2 - Reserved 3 - Do not care FMB640 FMC640 FMM640	FMS elements
113	Service Distance	4	Signed	-160635	167040	-	km	FMB640 FMC640 FMM640	FMS elements
122	Direction Indication	1	Unsigned	0	3	-	-	0 - Vehicle is moving Forward 1 - Reverse 2 - Error 3 - Not available FMB640 FMC640 FMM640	FMS elements
123	Tachograph Performance	1	Unsigned	0	3	-	-	0 - Normal performance 1 - Performance analysis 2 - Error 3 - Not available FMB640 FMC640 FMM640	FMS elements
124	Handling Info	1	Unsigned	0	3	-	-	0 - No handling information 1 - Handling information 2 - Error 3 - Not available FMB640 FMC640 FMM640	FMS elements
125	System Event	1	Unsigned	0	3	-	-	0 - No tachograph event 1 - Tachograph event 2 - Error 3 - Not available FMB640 FMC640 FMM640	FMS elements
127	Engine Coolant Temperature	1	Signed	-40	210	-	°C	Offset by -40 FMB640 FMC640 FMM640	FMS elements
128	Ambient Air Temperature	2	Signed	-273	1770	-	°C	FMB640 FMC640 FMM640	FMS elements
135	Fuel Rate	4	Unsigned	0	3212	-	l/h	FMB640 FMC640 FMM640	FMS elements
136	Instantaneous Fuel Economy	4	Unsigned	0	125	-	km/l	FMB640 FMC640 FMM640	FMS elements
137	PTO Drive Engagement	1	Unsigned	0	3	-	-	0 - No PTO drive is engaged 1 - At least one PTO drive is engaged 2 - Error 3 - Not available FMB640 FMC640 FMM640	FMS elements
138	High Resolution Engine Total Fuel Used	4	Unsigned	0	4211081.215	-	l or ml	Resolution in l or ml depending on the FMS fuel settings (item id 121) FMB640 FMC640 FMM640	FMS elements
139	Gross Combination Vehicle Weight	4	Unsigned	0	642550	-	kg	The total weight of the truck and all attached trailers. FMB640 FMC640 FMM640	FMS elements
229	AdBlue status	1	Unsigned	0	3	-	-	0 - Off 1 - Cond. Red 2 - Cond. Yellow 3 - Cond. info FMB640 FMC640 FMM640	FMS elements
357	Brake Pedal Position	1	Unsigned	0	100	-	%	The ratio of current brake pedal position to the maximum possible position FMB640 FMC640 FMM640	FMS elements
10348	Fuel level 2	1	Unsigned	0	100	-	%	This parameter shows fuel level in secondary tank (if fuel type is different then currently used fuel) FMB640 FMC640 FMM640	FMS elements
10349	MIL indicator	1	Unsigned	0	100	-	-	0 - OFF 1 - Condition Red 2 - Condition Yellow 3 - Condition Info 7 - Not Available FMB640 FMC640 FMM640 There are three possible conditions stated: Red, Yellow, Info. The interpretation of the status is manufacturer dependant and might be different. For details please refer to the manufacturer's document.	FMS elements
10428	Tell Tale 0	8	HEX	0	0xffffffff	-	-	IO element describes Tell Tale Block ID message received from Block ID 0 in Hexadecimal format. FMB640 FMC640 FMM640	FMS elements
10429	Tell Tale 1	8	HEX	0	0xffffffff	-	-	IO element describes Tell Tale Block ID message received from Block ID 1 in Hexadecimal format. FMB640 FMC640 FMM640	FMS elements
10430	Tell Tale 2	8	HEX	0	0xffffffff	-	-	IO element describes Tell Tale Block ID message received from Block ID 2 in Hexadecimal format. FMB640 FMC640 FMM640	FMS elements
10431	Tell Tale 3	8	HEX	0	0xffffffff	-	-	IO element describes Tell Tale Block ID message received from Block ID 3 in Hexadecimal format. FMB640 FMC640 FMM640	FMS elements
10455	AdBlue level	1	Unsigned	0	100	-	%	AdBlue level FMB640 FMC640 FMM640	FMS elements
10493	DTC DM1	4	Unsigned	0	4294967295	-	-	DTC DM1 FMB640	FMS elements
10494	DTC Time DM1	4	Unsigned	0	4294967295	-	s	DTC Time DM1 FMB640	FMS elements
10495	DTC DM2	4	Unsigned	0	4294967295	-	-	DTC DM2 FMB640	FMS elements
10496	DTC Time DM2	4	Unsigned	0	4294967295	-	s	DTC Time DM2 FMB640	FMS elements

CAN adapters elements

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
12	Program Number	2	Unsigned	0	999	-	-	Value: Min - 0, Max - 999	FMB640 FMC640 FMM640	CAN adapters elements
13	Module ID	8	Unsigned	0	0xffffffff	-	-	Module ID	FMB640 FMC640 FMM640	CAN adapters elements

14	Engine Worktime	4	Unsigned	0	16777215	-	min	Engine work time in minutes	FMB640 EMC640 EMM640	CAN adapters elements
15	Engine Worktime (Counted)	4	Unsigned	0	16777215	-	min	Total Engine work time in minutes	FMB640 EMC640 EMM640	CAN adapters elements
16	Total Mileage (Counted)	4	Unsigned	0	4294967295	-	m	Total Vehicle Mileage, m	FMB640 EMC640 EMM640	CAN adapters elements
17	Fuel Consumed (counted)	4	Unsigned	0	2147483647	0,1	l	Total Fuel Consumed, l	FMB640 EMC640 EMM640	CAN adapters elements
18	Fuel Rate	2	Unsigned	0	32768	0,1	l/h	Fuel Rate l/h	FMB640 EMC640 EMM640	CAN adapters elements
19	AdBlue Level Percent	1	Unsigned	0	255	-	%	AdBlue, %	FMB640 EMC640 EMM640	CAN adapters elements
20	AdBlue Level Liters	2	Unsigned	0	65535	0,1	l	AdBlue level, L	FMB640 EMC640 EMM640	CAN adapters elements
23	Engine Load	1	Unsigned	0	130	-	%	Engine load, %	FMB640 EMC640 EMM640	CAN adapters elements
25	Engine Temperature	2	Signed	-600	1270	0,1	°C	Engine Temperature, °C	FMB640 EMC640 EMM640	CAN adapters elements
26	Axle 1 Load	2	Unsigned	0	32768	-	kg	Axle 1 load, kg	FMB640 EMC640 EMM640	CAN adapters elements
27	Axle 2 Load	2	Unsigned	0	32768	-	kg	Axle 2 load, kg	FMB640 EMC640 EMM640	CAN adapters elements
28	Axle 3 Load	2	Unsigned	0	32768	-	kg	Axle 3 load, kg	FMB640 EMC640 EMM640	CAN adapters elements
29	Axle 4 Load	2	Unsigned	0	32768	-	kg	Axle 4 load, kg	FMB640 EMC640 EMM640	CAN adapters elements
30	Vehicle Speed	1	Unsigned	0	255	-	km/h	Value in km/h	FMB640 EMC640 EMM640	CAN adapters elements
31	Accelerator Pedal Position	1	Unsigned	0	255	-	%	Value in percentages, %	FMB640 EMC640 EMM640	CAN adapters elements
32	Axle 5 Load	2	Unsigned	0	32768	-	kg	Axle 5 load, kg	FMB640 EMC640 EMM640	CAN adapters elements
33	Fuel Consumed	4	Unsigned	0	2147483647	0,1	l	Value in liters, L	FMB640 EMC640 EMM640	CAN adapters elements
34	Fuel Level Liters	2	Unsigned	0	65535	0,1	l	Value in liters, L	FMB640 EMC640 EMM640	CAN adapters elements
35	Engine RPM	2	Unsigned	0	16384	-	rpm	Value in rounds per minute, rpm	FMB640 EMC640 EMM640	CAN adapters elements
36	Total Mileage	4	Unsigned	0	4294967295	-	m	Value in meters, m	FMB640 EMC640 EMM640	CAN adapters elements
37	Fuel Level Percent	1	Unsigned	0	255	-	%	Value in percentages, %	FMB640 EMC640 EMM640	CAN adapters elements
38	Control State Flags	4	Unsigned	0	4294967295	-	-	Control State Flags	FMB640 EMC640 EMM640	CAN adapters elements
39	Agricultural Machinery Flags	8	Unsigned	0	0xffffffff	-	-	Agricultural machinery flags	FMB640 EMC640 EMM640	CAN adapters elements
40	Harvesting Time	4	Unsigned	0	16777215	-	min	Harvesting time, minutes	FMB640 EMC640 EMM640	CAN adapters elements
41	Area of Harvest	4	Unsigned	0	4294967295	-	m2	Area of Harvest, m2	FMB640 EMC640 EMM640	CAN adapters elements
42	Mowing Efficiency	4	Unsigned	0	4294967295	-	m2/h	Mowing efficiency, (m^2)/h	FMB640 EMC640 EMM640	CAN adapters elements
43	Grain Mown Volume	4	Unsigned	0	4294967295	-	kg	Mown Volume, kg	FMB640 EMC640 EMM640	CAN adapters elements
44	Grain Moisture	2	Unsigned	0	65535	0,1	%	Grain Moisture in proc. %	FMB640 EMC640 EMM640	CAN adapters elements
45	Harvesting Drum RPM	2	Unsigned	0	65535	-	rpm	Harvesting Drum RPM, RPM	FMB640 EMC640 EMM640	CAN adapters elements
46	Gap Under Harvesting Drum	1	Unsigned	0	255	-	mm	Gap Under Harvesting Drum, mm	FMB640 EMC640 EMM640	CAN adapters elements
47	Security State Flags	8	Unsigned	0	0xffffffff	-	-	Security State Flag	FMB640 EMC640 EMM640	CAN adapters elements
141	Battery Temperature	2	Unsigned	-600	1270	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	CAN adapters elements
142	Battery Level Percent	1	Unsigned	0	255	-	%	Value in percentages, %	FMB640 EMC640 EMM640	CAN adapters elements
143	Door Status	2	Unsigned	0	16128	-	-	Min - 0, Max - 16128 Door status is represented as bitmask converted to decimal value. Possible values: 0 - all doors closed, 0x100 (256) - front left door is opened, 0x200 (512) - front right door is opened, 0x400 (1024) - rear left door is opened, 0x800 (2048) - rear right door is opened, 0x1000 (4096) - hood is opened, 0x2000 (8192) - trunk is opened, 0x3F00 (16128) - all doors are opened, or combinations of values	FMB640 EMC640 EMM640	CAN adapters elements
176	DTC Errors	1	Unsigned	0	255	-	-	DTC Errors	FMB640 EMC640 EMM640	CAN adapters elements
226	CNG Status	1	Unsigned	0	1	-	-	0 - Engine not on CNG; 1 - Engine on CNG.	FMB640 EMC640 EMM640	CAN adapters elements
227	CNG Used	4	Unsigned	0	4294967295	-	kg	CNG Used	FMB640 EMC640 EMM640	CAN adapters elements
228	CNG Level	2	Unsigned	0	65535	-	%	CNG Level	FMB640 EMC640 EMM640	CAN adapters elements
500	Slope Of Arm	2	Signed	-3276	3276	-	°	Slope Of Arm, degrees °	FMB640 EMC640 EMM640	CAN adapters elements
501	Rotation Of Arm	2	Signed	-180	180	-	°	Rotation Of Arm, degrees °	FMB640 EMC640 EMM640	CAN adapters elements
502	Eject Of Arm	2	Unsigned	0	6553	-	m	Eject Of Arm, m	FMB640 EMC640 EMM640	CAN adapters elements
503	Horizontal Distance Arm	2	Unsigned	0	6553	-	m	Horizontal Distance Arm Vehicle, m	FMB640 EMC640 EMM640	CAN adapters elements
504	Height Arm Above Ground	2	Unsigned	0	6553	-	m	Height Arm Above ground, m	FMB640 EMC640 EMM640	CAN adapters elements
505	Drill RPM	2	Unsigned	0	65535	-	rpm	Drill RPM, RPM	FMB640 EMC640 EMM640	CAN adapters elements
506	Spread Salt	2	Unsigned	0	655	-	g/m2	Amount Of Spread Salt Square Meter, g/m2	FMB640 EMC640 EMM640	CAN adapters elements
507	Battery Voltage	2	Unsigned	0	6553	-	V	Battery Voltage, V	FMB640 EMC640 EMM640	CAN adapters elements
508	Spread Fine Grained Salt	4	Unsigned	0	1677722	-	T	Amount Of Spread Fine Grained Salt, T	FMB640 EMC640 EMM640	CAN adapters elements
509	Coarse Grained Salt	4	Unsigned	0	1677722	-	T	Amount Of Coarsed Grained Salt, T	FMB640 EMC640 EMM640	CAN adapters elements

510	Spread DiMix	4	Unsigned	0	1677722	-	T	Amount Of Spread DiMix, T	FMB640 EMC640 EMM640	CAN adapters elements
511	Spread Coarse Grained Calcium	4	Unsigned	0	1677722	-	m2	Amount Of Spread Coarse Grained Calcium, m2	FMB640 EMC640 EMM640	CAN adapters elements
512	Spread Calcium Chloride	4	Unsigned	0	1677722	-	m2	Amount Of Spread Calcium Chloride, m2	FMB640 EMC640 EMM640	CAN adapters elements
513	Spread Sodium Chloride	4	Unsigned	0	1677722	-	m2	Amount Of Spread Sodium Chloride, m2	FMB640 EMC640 EMM640	CAN adapters elements
514	Spread Magnesium Chloride, m2	4	Unsigned	0	1677722	-	m2	Amount Of Spread Magnesium Chloride, m2	FMB640 EMC640 EMM640	CAN adapters elements
515	Amount Of Spread Gravel	4	Unsigned	0	1677722	-	T	Amount Of Spread Gravel, T	FMB640 EMC640 EMM640	CAN adapters elements
516	Amount Of Spread Sand	4	Unsigned	0	1677722	-	T	Amount Of Spread Sand, T	FMB640 EMC640 EMM640	CAN adapters elements
517	Width Pouring Left	2	Unsigned	0	655	-	m	Width pouring left, m	FMB640 EMC640 EMM640	CAN adapters elements
518	Width Pouring Right	2	Unsigned	0	655	-	m	Width pouring right, m	FMB640 EMC640 EMM640	CAN adapters elements
519	Salt Spreader Working Hours	4	Unsigned	0	1677722	-	h	Salt Spreader Working Hours, h	FMB640 EMC640 EMM640	CAN adapters elements
520	Distance During Salting	4	Unsigned	0	1677722	-	km	Distance During salting, km	FMB640 EMC640 EMM640	CAN adapters elements
521	Load Weight	4	Unsigned	0	16777215	-	kg	Load Weight, kg	FMB640 EMC640 EMM640	CAN adapters elements
522	Retarder Load	1	Unsigned	0	130	-	%	Retarder Load, %	FMB640 EMC640 EMM640	CAN adapters elements
523	Cruise Time	4	Unsigned	0	16777215	-	min	Cruise time, minutes	FMB640 EMC640 EMM640	CAN adapters elements
524	Engine Oil Level	1	Unsigned	0	255	-	-	Oil level	FMB640 EMC640 EMM640	CAN adapters elements
525	Fault Codes	128	ASCII	0	128	-	-	Fault Codes (values separated via ".")	FMB640 EMC640 EMM640	CAN adapters elements
526	Vehicles Range On Battery	4	Unsigned	0	16777215	-	m	Vehicles Range On Battery	FMB640 EMC640 EMM640	CAN adapters elements
527	Vehicles Range On Additional Fuel	4	Unsigned	0	2147483647	-	m	Vehicles Range On Additional Fuel	FMB640 EMC640 EMM640	CAN adapters elements
528	VIN	17	ASCII	0	0xFF	-	-	VIN number	FMB640 EMC640 EMM640	CAN adapters elements
529	Module ID 17B	17	HEX	0	0x7FFFFFFF	-	-	Module ID 17 bytes	FMB640 EMC640 EMM640	CAN adapters elements
10631	LVCAN Driver Seatbelt	1	Unsigned	0	1	-	-	Driver Seatbelt	FMB640 EMC640 EMM640	CAN adapters elements
10632	LVCAN Front Passenger Seatbelt	1	Unsigned	0	1	-	-	Front Passenger Seatbelt	FMB640 EMC640 EMM640	CAN adapters elements

Eventual I/O elements

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
52	Tacho drive no card	1	Unsigned	0	1	-	-	0 - No card stop 1 - No card start	FMB640 EMC640 EMM640	Eventual I/O elements
70	PCB Temperature	2	Signed	-550	1150	0,1	°C	Degrees (°C)	FMB640 EMC640 EMM640	Eventual I/O elements
155	Geofence zone 01	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
156	Geofence zone 02	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
157	Geofence zone 03	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
158	Geofence zone 04	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
159	Geofence zone 05	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
160	Geofence zone 06	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
161	Geofence zone 07	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
162	Geofence zone 08	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
163	Geofence zone 09	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
164	Geofence zone 10	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
165	Geofence zone 11	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
166	Geofence zone 12	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
167	Geofence zone 13	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
168	Geofence zone 14	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
169	Geofence zone 15	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
170	Geofence zone 16	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
171	Geofence zone 17	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
172	Geofence zone 18	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
173	Geofence zone 19	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
174	Geofence zone 20	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements
327	Geofence zone 21	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 EMM640	Eventual I/O elements

569	Geofence zone 70	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
570	Geofence zone 71	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
571	Geofence zone 72	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
572	Geofence zone 73	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
573	Geofence zone 74	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
574	Geofence zone 75	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
575	Geofence zone 76	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
576	Geofence zone 77	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
577	Geofence zone 78	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
578	Geofence zone 79	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
579	Geofence zone 80	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
580	Geofence zone 81	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
581	Geofence zone 82	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
582	Geofence zone 83	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
583	Geofence zone 84	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
584	Geofence zone 85	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
585	Geofence zone 86	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
586	Geofence zone 87	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
587	Geofence zone 88	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
588	Geofence zone 89	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
589	Geofence zone 90	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
590	Geofence zone 91	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
591	Geofence zone 92	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
592	Geofence zone 93	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
593	Geofence zone 94	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
594	Geofence zone 95	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
595	Geofence zone 96	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
596	Geofence zone 97	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
597	Geofence zone 98	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
598	Geofence zone 99	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
599	Geofence zone 100	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
175	Auto Geofence	1	Unsigned	0	1	-	-	0 - target left zone 1 - target entered zone	FMB640 EMC640 FMM640	Eventual I/O elements
250	Trip	1	Unsigned	0	1	-	-	1 - trip start. 0 - trip stop.	FMB640 EMC640 FMM640	Permanent I/O elements
255	Over Speeding	1	Unsigned	0	255	-	km/h	At over speeding start km/h, at over speeding end km/h	FMB640 EMC640 FMM640	Eventual I/O elements
257	Crash Trace Data	466	HEX	0	466	-	-	Crash Trace Data	FMB640 EMC640 FMM640	Permanent I/O elements
258	EcoMaximum	8	Unsigned	0	0xffffffff	-	-	Element stores maximum accelerometer values in mg on all axis during Eco driving event 8 Bytes: 2B Zeros 2B - X axis 2B - Y axis 2B - Z axis	FMB640 EMC640 FMM640	Permanent I/O elements
259	EcoAverage	8	Unsigned	0	0xffffffff	-	-	Element stores average accelerometer values in mg on all axis during Eco 8 Bytes: 2B Zeros 2B - X axis 2B - Y axis 2B - Z axis	FMB640 EMC640 FMM640	Permanent I/O elements
260	EcoDuration	2	Unsigned	0	65535	-	-	Duration of Eco driving in milliseconds.	FMB640 EMC640 FMM640	Permanent I/O elements
243	Idling	1	Unsigned	0	1	-	-	0 - moving, 1 - idling	FMB640 EMC640 FMM640	Eventual I/O elements
244	Camera Image Generated	4	Unsigned	0	4294967295	-	-	Image id is timestamp value	FMB640 EMC640 FMM640	Eventual I/O elements
253	Green Driving Type	1	Unsigned	1	3	-	-	1 - harsh acceleration, 2 - harsh braking, 3 - harsh cornering	FMB640 EMC640 FMM640	Eventual I/O elements
246	Towing	1	Unsigned	0	1	-	-	0 - steady, 1 - towing	FMB640 EMC640 FMM640	Eventual I/O elements
248	Geofence Zone Over Speeding	1	Unsigned	0	255	-	-	Number of Geofence Zone where Over Speeding is detected	FMB640 EMC640 FMM640	Eventual I/O elements
247	Crash Detection	1	Unsigned	0	5	-	-	1 - Crash detected 2 - limited crash trace (device not calibrated) 3 - limited crash trace (device is calibrated) 4 - full crash trace (device not calibrated) 5 - full crash trace (device is calibrated)	FMB640 EMC640 FMM640	Eventual I/O elements
251	Immobilizer	1	Unsigned	0	3	-	-	0 - iButton not connected 1 - iButton connected (Immobilizer) 2 - iButton connected (Authorized Driving) 3 - Authorization timeout	FMB640 EMC640 FMM640	Eventual I/O elements
254	Green Driving Value	1	Unsigned	0	255	acc and braking: 0.01	G or rad	Depending on green driving type: if harsh acceleration or braking - g*100 (value 123 -> 1.23g), if harsh cornering - degrees (value in radians)	FMB640 EMC640 FMM640	Eventual I/O elements
249	Jamming	1	Unsigned	0	1	-	-	1 - jamming start 0 - jamming stop	FMB640 EMC640 FMM640	Eventual I/O elements

252	Authorized Driving	1	Unsigned	0	3	-	-	0 - iButton not connected 1 - authorized iButton connected 2 - non authorized iButton attached 3 - authorization timeout	FMB640 FMC640 FMM640	Eventual I/O elements
242	Data Limit Hit	1	Unsigned	0	1	-	-	0 - Data limit hit in home; 1 - Data limit hit in roaming.	FMB640 FMC640 FMM640	Eventual I/O elements
358	Custom Scenario 1	1	Unsigned	0	1	-	-		FMB640 FMC640 FMM640	Eventual I/O elements
359	Custom Scenario 2	1	Unsigned	0	1	-	-		FMB640 FMC640 FMM640	Eventual I/O elements
360	Custom Scenario 3	1	Unsigned	0	1	-	-		FMB640 FMC640 FMM640	Eventual I/O elements
361	Custom Scenario 4	1	Unsigned	0	1	-	-		FMB640 FMC640 FMM640	Eventual I/O elements
10611	RS232_COM1Data	200	HEX	0	200	-	-	RS232_COM1Data to IO	FMB640 FMC640 FMM640	Permanent I/O elements
10612	RS232_COM2Data	200	HEX	0	200	-	-	RS232_COM2Data to IO	FMB640 FMC640 FMM640	Permanent I/O elements

Manual CAN elements

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
145	Manual CAN 00	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
146	Manual CAN 01	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
147	Manual CAN 02	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
148	Manual CAN 03	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
149	Manual CAN 04	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
150	Manual CAN 05	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
151	Manual CAN 06	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
152	Manual CAN 07	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
153	Manual CAN 08	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
154	Manual CAN 09	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
380	Manual CAN 10	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
381	Manual CAN 11	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
382	Manual CAN 12	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
383	Manual CAN 13	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
384	Manual CAN 14	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
385	Manual CAN 15	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
386	Manual CAN 16	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
387	Manual CAN 17	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
388	Manual CAN 18	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
389	Manual CAN 19	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10298	Manual CAN 20	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10299	Manual CAN 21	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10300	Manual CAN 22	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10301	Manual CAN 23	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10302	Manual CAN 24	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10303	Manual CAN 25	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10304	Manual CAN 26	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10305	Manual CAN 27	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10306	Manual CAN 28	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10307	Manual CAN 29	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10308	Manual CAN 30	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10309	Manual CAN 31	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10310	Manual CAN 32	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10311	Manual CAN 33	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10312	Manual CAN 34	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements
10313	Manual CAN 35	1-8	Unsigned	0	0xffffffffffff	-	-		FMB640 FMC640 FMM640	Manual CAN elements

10314	Manual CAN 36	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10315	Manual CAN 37	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10316	Manual CAN 38	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10317	Manual CAN 39	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10318	Manual CAN 40	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10319	Manual CAN 41	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10320	Manual CAN 42	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10321	Manual CAN 43	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10322	Manual CAN 44	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10323	Manual CAN 45	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10324	Manual CAN 46	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10325	Manual CAN 47	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10326	Manual CAN 48	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10327	Manual CAN 49	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10328	Manual CAN 50	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10329	Manual CAN 51	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10330	Manual CAN 52	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10331	Manual CAN 53	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10332	Manual CAN 54	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10333	Manual CAN 55	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10334	Manual CAN 56	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10335	Manual CAN 57	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10336	Manual CAN 58	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10337	Manual CAN 59	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10338	Manual CAN 60	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10339	Manual CAN 61	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10340	Manual CAN 62	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10341	Manual CAN 63	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10342	Manual CAN 64	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10343	Manual CAN 65	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10344	Manual CAN 66	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10345	Manual CAN 67	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10346	Manual CAN 68	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements
10347	Manual CAN 69	1-8	Unsigned	0	0xffffffff	-	-	FMB640 EMC640 EMM640	Manual CAN elements

Tachograph data elements

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
183	Drive Recognize	1	Unsigned	0	3	-	-	Parameter shall indicate the state of work of driver 1, i.e. activity currently selected on the recording unit for the driver. 0 - Rest; 1 - Driver available	FMB640 EMC640 EMM640	Tachograph data elements
184	Driver 1 Working State	1	Unsigned	0	7	-	-	2 - Work; 3 - Drive; 6 - Error; 7 - Not available.	FMB640 EMC640 EMM640	Tachograph data elements
185	Driver 2 Working State	1	Unsigned	0	7	-	-	Parameter shall indicate the state of work of driver 2, i.e. activity currently selected on the recording unit for the driver. 0 - Rest; 1 - Driver available	FMB640 EMC640 EMM640	Tachograph data elements
186	Tachograph Over Speed	1	Unsigned	0	3	-	-	2 - Work; 3 - Drive; 6 - Error; 7 - Not available.	FMB640 EMC640 EMM640	Tachograph data elements
187	Driver 1 Card Presence	1	Unsigned	0	3	-	-		FMB640 EMC640 EMM640	Tachograph data elements
188	Driver 2 Card Presence	1	Unsigned	0	3	-	-		FMB640 EMC640 EMM640	Tachograph data elements

189	Driver 1 Time Related States	1	Unsigned	0	15	-	-	0 - normal; 1 - 15 min before 4.5h; 2 - 4.5h reached; 3 - 15 min before 9h; 4 - 9 h reached; 5 - 15 min before 16h; 6 - 16h reached; 7 - weekly driving time pre-warning active; 8 - weekly driving time warning active; 9 - 2 weeks driving time pre-warning active; 10 - 2 weeks driving time warning active; 11 - driver 1 card expiry warning active; 12 - next mandatory driver 1 card download warning active; 13 - Other; 14 - Error; 15 - Not available..	FMB640 FMC640 FMM640	Tachograph data elements
190	Driver 2 Time Related States	1	Unsigned	0	15	-	-	0 - normal; 1 - 15 min before 4.5h; 2 - 4.5h reached; 3 - 15 min before 9h; 4 - 9 h reached; 5 - 15 min before 16h; 6 - 16h reached; 7 - weekly driving time pre-warning active; 8 - weekly driving time warning active; 9 - 2 weeks driving time pre-warning active; 10 - 2 weeks driving time warning active; 11 - driver 2 card expiry warning active; 12 - next mandatory driver 2 card download warning active; 13 - Other; 14 - Error; 15 - Not available..	FMB640 FMC640 FMM640	Tachograph data elements
191	Vehicle Speed	2	Unsigned	0	65535	-	km/h		FMB640 FMC640 FMM640	Tachograph data elements
192	Odometer	4	Unsigned	0	4294967295	-	m	Total vehicle distance	FMB640 FMC640 FMM640	Tachograph data elements
193	Trip Distance	4	Unsigned	0	4294967295	-	m	Current vehicle distance	FMB640 FMC640 FMM640	Tachograph data elements
194	Timestamp	4	Unsigned	0	4294967295	-	-	How to read Timestamp	FMB640 FMC640 FMM640	Tachograph data elements
231	Vehicle Registration Number Part1	8	Unsigned	0	0xffffffffffff	-	-	ASCII bytes	FMB640 FMC640 FMM640	Tachograph data elements
232	Vehicle Registration Number Part2	8	Unsigned	0	0xffffffffffff	-	-	ASCII bytes	FMB640 FMC640 FMM640	Tachograph data elements
233	Vehicle Identification Number Part1	8	Unsigned	0	0xffffffffffff	-	-	ASCII bytes	FMB640 FMC640 FMM640	Tachograph data elements
234	Vehicle Identification Number Part2	8	Unsigned	0	0xffffffffffff	-	-	ASCII bytes	FMB640 FMC640 FMM640	Tachograph data elements
235	Vehicle Identification Number Part3	1	Unsigned	0	0xff	-	-	ASCII bytes	FMB640 FMC640 FMM640	Tachograph data elements
222	Card 1 Issuing Member State	1	Unsigned	0	255	-	-	NationNumeric as described in EEC 3821_85	FMB640 FMC640 FMM640	Tachograph data elements
223	Card 2 Issuing Member State	1	Unsigned	0	255	-	-	NationNumeric as described in EEC 3821_85	FMB640 FMC640 FMM640	Tachograph data elements
195	Driver 1 ID MSB	8	Unsigned	0	0xffffffffffff	-	-	How to read Driver ID	FMB640 FMC640 FMM640	Tachograph data elements
196	Driver 1 ID LSB	8	Unsigned	0	0xffffffffffff	-	-	How to read Driver ID	FMB640 FMC640 FMM640	Tachograph data elements
197	Driver 2 ID MSB	8	Unsigned	0	0xffffffffffff	-	-	How to read Driver ID	FMB640 FMC640 FMM640	Tachograph data elements
198	Driver 2 ID LSB	8	Unsigned	0	0xffffffffffff	-	-	How to read Driver ID	FMB640 FMC640 FMM640	Tachograph data elements
56	Driver 1 Continuous Driving Time	2	Unsigned	0	0xffff	-	Minutes	This parameter shall be computed as the current accumulated driving times of a particular drive.	FMB640 FMC640 FMM640	Tachograph data elements
57	Driver 2 Continuous Driving Time	2	Unsigned	0	0xffff	-	Minutes	This parameter shall be defined as Driver 2 continuous driving time.	FMB640 FMC640 FMM640	Tachograph data elements
58	Driver 1 Cumulative Break Time	2	Unsigned	0	0xffff	-	Minutes	This parameter shall indicate the uninterrupted break time for driver 1 as defined by legal regulation.	FMB640 FMC640 FMM640	Tachograph data elements
59	Driver 2 Cumulative Break Time	2	Unsigned	0	0xffff	-	Minutes	This parameter shall indicate the uninterrupted break time for driver 2 as defined by legal regulation.	FMB640 FMC640 FMM640	Tachograph data elements
60	Driver 1 Selected Activity Duration	2	Unsigned	0	0xffff	-	Minutes	Parameter shall indicate the current duration of the selected activity, since selected and which may be the current driving period, availability period, rest period or work period.	FMB640 FMC640 FMM640	Tachograph data elements
61	Driver 2 Selected Activity Duration	2	Unsigned	0	0xffff	-	Minutes	Parameter shall indicate the current duration of the selected activity, since selected and which may be the current driving period, availability period, rest period or work period.	FMB640 FMC640 FMM640	Tachograph data elements
69	Driver 1 Cumulative Driving Time	2	Unsigned	0	0xffff	-	Minutes	Parameter shall be computed as the current accumulated driving times of driver 1 (driver), for the previous and the current week.	FMB640 FMC640 FMM640	Tachograph data elements
77	Driver 2 Cumulative Driving Time	2	Unsigned	0	0xffff	-	Minutes	Parameter shall be computed as the current accumulated driving times of driver 2 (driver), for the previous and the current week.	FMB640 FMC640 FMM640	Tachograph data elements
48	Tacho Data Source	1	Unsigned	0	4	-	-	As possible select different sources from which tacho data will be readed, this parameter indicate from which source data is read. 0 - Unknown (data is not available); 1 - K-Line; 2 - ALL-CAN300; 3 - TachoCAN; 4 - FMS.	FMB640 FMC640 FMM640	Tachograph data elements
10501	Drivers hours rules pre warning time delay	1	Unsigned	0	255	-	Minutes	This parameter shall be the time delay between a pre-warning and the associated warning for daily driving time, weekly driving time, two weeks driving time, and time to start daily/weekly rest period Operating range 15-60 min	FMB640 FMC640 FMM640	Tachograph data elements
10502	Out Of Scope Condition	1	Unsigned	0	255	-	-	This parameter shall be used to indicate whether an out of scope specific condition is currently open. Value: 00 – no out of scope condition opened; 01 – out of scope condition opened.	FMB640 FMC640 FMM640	Tachograph data elements
10503	Next Calibration Date	4	Unsigned	0	4294967295	-	Timestamp	This parameter shall be used to indicate next mandatory calibration date of the tachograph and shall be carried out by the authorized inspection authority. Value: Byte 1 – month; Byte 2 – day; Byte 3 – year How to parse Next Calibration Date	FMB640 FMC640 FMM640	Tachograph data elements
10504	Driver 1 end of last daily rest report	4	Unsigned	0	4294967295	-	Timestamp	This parameter shall be the end of the last daily rest period of driver 1, as computed by the tachograph using driver 1 card data. How to read Timestamp	FMB640 FMC640 FMM640	Tachograph data elements
10505	Driver 1 end of last weekly rest period	4	Unsigned	0	4294967295	-	Timestamp	This parameter shall be the end of the last weekly rest period of driver 1, as computed by the tachograph using driver 1 card data. How to read Timestamp	FMB640 FMC640 FMM640	Tachograph data elements
10506	Driver 1 end of second last weekly rest period	4	Unsigned	0	4294967295	-	Timestamp	This parameter shall be the end of the second last weekly rest period of driver 1, as computed by the tachograph using driver 1 card data. How to read Timestamp	FMB640 FMC640 FMM640	Tachograph data elements
10507	Driver 1 current daily driving time	2	Unsigned	0	65535	-	Minutes	This parameter shall be the current daily driving time of driver 1, as computed by the tachograph using driver 1 card data.	FMB640 FMC640 FMM640	Tachograph data elements
10508	Driver 1 current weekly driving time	2	Unsigned	0	65535	-	Minutes	This parameter shall be the current weekly driving time of driver 1, as computed by the tachograph using driver 1 card data.	FMB640 FMC640 FMM640	Tachograph data elements
10509	Driver 1 time left until new daily rest period	2	Unsigned	0	65535	-	Minutes	This parameter shall be the calendar time left until driver 1 shall start a new daily rest period.	FMB640 FMC640 FMM640	Tachograph data elements
10510	Driver 1 number of times 9h daily driving time exceeds	1	Unsigned	0	255	-	-	This parameter shall be the number of times the driver exceeded 9 h daily driving time in the current week. Value: 0 times to 13 times.	FMB640 FMC640 FMM640	Tachograph data elements
10511	Driver 2 end of last daily rest report	4	Unsigned	0	4294967295	-	Timestamp	This parameter shall be the end of the last daily rest period of driver 2, as computed by the tachograph using driver 2 card data. How to read Timestamp	FMB640 FMC640 FMM640	Tachograph data elements
10512	Driver 2 end of last weekly rest period	4	Unsigned	0	4294967295	-	Timestamp	This parameter shall be the end of the last weekly rest period of driver 2, as computed by the tachograph using driver 2 card data. How to read Timestamp	FMB640 FMC640 FMM640	Tachograph data elements

10513	Driver 2 end of second last weekly rest period	4	Unsigned	0	4294967295	-	Timestamp	This parameter shall be the end of the second last weekly rest period of driver 2, as computed by the tachograph using driver 2 card data.	FMB640 FMC640 FMM640	Tachograph data elements
10514	Driver 2 current daily driving time	2	Unsigned	0	65535	-	Minutes	This parameter shall be the current daily driving time of driver 2, as computed by the tachograph using driver 2 card data.	FMB640 FMC640 FMM640	Tachograph data elements
10515	Driver 2 current weekly driving time	2	Unsigned	0	65535	-	Minutes	This parameter shall be the current weekly driving time of driver 2, as computed by the tachograph using driver 2 card data.	FMB640 FMC640 FMM640	Tachograph data elements
10516	Driver 2 time left until new daily rest period	2	Unsigned	0	65535	-	Minutes	This parameter shall be the calendar time left until driver 2 shall start a new daily rest period.	FMB640 FMC640 FMM640	Tachograph data elements
10517	Driver 2 number of times 9h daily driving time exceeds	1	Unsigned	0	255	-	-	This parameter shall be the number of times the driver exceeded 9 h daily driving time in the current week. Value: 0 times to 13 times.	FMB640 FMC640 FMM640	Tachograph data elements
10518	Driver 1 Name	36	ASCII	0	36	-	-	Driver1 Name (FirstByte - Coding ISO/IEC 8859)	FMB640 FMC640 FMM640	Tachograph data elements
10519	Driver 1 SurName	36	ASCII	0	36	-	-	Driver1 SurName (FirstByte - Coding ISO/IEC 8859)	FMB640 FMC640 FMM640	Tachograph data elements
10520	Driver 2 Name	36	ASCII	0	36	-	-	Driver2 Name (FirstByte - Coding ISO/IEC 8859)	FMB640 FMC640 FMM640	Tachograph data elements
10521	Driver 2 SurName	36	ASCII	0	36	-	-	Driver2 SurName (FirstByte - Coding ISO/IEC 8859)	FMB640 FMC640 FMM640	Tachograph data elements
10522	Driver 1 Time Left Until New Weekly Rest Period	2	Unsigned	0	65535	-	Minutes	This parameter shall be the calendar time left until driver 1 shall start a new weekly rest period.	FMB640 FMC640 FMM640	Tachograph data elements
10523	Driver 2 Time Left Until New Weekly Rest Period	2	Unsigned	0	65535	-	Minutes	This parameter shall be the calendar time left until driver 2 shall start a new weekly rest period.	FMB640 FMC640 FMM640	Tachograph data elements
10524	Driver 1 Minimum Daily Rest	2	Unsigned	0	65535	-	Minutes	This parameter shall be the minimum daily rest the driver 1 needs to do to fulfil an on-going or approaching daily rest period	FMB640 FMC640 FMM640	Tachograph data elements
10525	Driver 2 Minimum Daily Rest	2	Unsigned	0	65535	-	Minutes	This parameter shall be the minimum daily rest the driver 2 needs to do to fulfil an on-going or approaching daily rest period	FMB640 FMC640 FMM640	Tachograph data elements
10526	Driver 1 Minimum Weekly Rest	2	Unsigned	0	65535	-	Minutes	This parameter shall be the minimum weekly rest the driver 1 needs to do to regular or reduced weekly rest period plus compensation hours, if any.	FMB640 FMC640 FMM640	Tachograph data elements
10527	Driver 2 Minimum Weekly Rest	2	Unsigned	0	65535	-	Minutes	This parameter shall be the minimum weekly rest the driver 2 needs to do to fulfil an on-going or approaching weekly rest period. It shall be set to regular or reduced weekly rest period plus compensation hours, if any.	FMB640 FMC640 FMM640	Tachograph data elements
10528	Driver 1 Duration Of Next Break Rest	2	Unsigned	0	65535	-	Minutes	This parameter shall be set to the minimum duration of next break/rest for driver 1	FMB640 FMC640 FMM640	Tachograph data elements
10529	Driver 2 Duration Of Next Break Rest	2	Unsigned	0	65535	-	Minutes	This parameter shall be set to the minimum duration of next break/rest for driver 2	FMB640 FMC640 FMM640	Tachograph data elements
10530	Driver 1 Remaining Time Until Next Break Or Rest	2	Unsigned	0	65535	-	Minutes	This parameter shall be set to the remaining time until next rest or break period for driver 1	FMB640 FMC640 FMM640	Tachograph data elements
10531	Driver 2 Remaining Time Until Next Break Or Rest	2	Unsigned	0	65535	-	Minutes	This parameter shall be set to the remaining time until next rest or break period for driver 2	FMB640 FMC640 FMM640	Tachograph data elements
10532	Driver 1 Remaining Current Driving Time	2	Unsigned	0	65535	-	Minutes	Defined in minutes for the remaining of current driving time	FMB640 FMC640 FMM640	Tachograph data elements
10533	Driver 1 Remaining Driving Time On Current Shift	2	Unsigned	0	65535	-	Minutes	Defined in minutes for driving time on current driver shift	FMB640 FMC640 FMM640	Tachograph data elements
10534	Driver 1 Remaining Driving Time Of Current Week	2	Unsigned	0	65535	-	Minutes	Defined in minutes for the remaining driving time of current week	FMB640 FMC640 FMM640	Tachograph data elements
10535	Driver 1 Open Compensation In The Last Week	2	Unsigned	0	65535	-	Minutes	Defined in minutes for the open compensations in the last week	FMB640 FMC640 FMM640	Tachograph data elements
10536	Driver 1 Open Compensation In Week Before Last	2	Unsigned	0	65535	-	Minutes	Defined in minutes for the open compensation in the week before last	FMB640 FMC640 FMM640	Tachograph data elements
10537	Driver 1 Open Compensation In 2nd Week Before Last	2	Unsigned	0	65535	-	Minutes	Defined in minutes for the open compensation in second week before last	FMB640 FMC640 FMM640	Tachograph data elements
10538	Driver 1 Additional Information	2	Unsigned	0	65535	-	Bit encoded	Defined in bits which is additional diagnostic data records from tachograph. VDO Counter: Bit Encoded Parsing	FMB640 FMC640 FMM640	Tachograph data elements
10539	Driver 1 Remaining Time Of Current Break Rest	2	Unsigned	0	65535	-	Minutes	Defined in minutes how much time left till current break/rest	FMB640 FMC640 FMM640	Tachograph data elements
10540	Driver 1 Time Left Until Next Driving Period	2	Unsigned	0	65535	-	Minutes	Defined in minutes for time left until next driving period	FMB640 FMC640 FMM640	Tachograph data elements
10541	Driver 1 Duration Of Next Driving Period	2	Unsigned	0	65535	-	Minutes	Defined in minutes for time duration of the next driving period	FMB640 FMC640 FMM640	Tachograph data elements

Cameras/Video

Property ID in ASN packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
288	ME Speed Type	1	Unsigned	0	7	-	-	0 - Silent; 1 - LWD Left; 2 - LWD Right; 3 - JIB; 4 - TSR; 5 - LRCG; 6 - PCW = PCG; 7 - Push in danger zone (if enabled).	FMB640 FMC640 FMM640	Camera/Video
289	ME Pedestrian in Danger Zone	1	Unsigned	0	1	-	-	0 - Pedestrian not in danger zone; 1 - Pedestrian in danger zone.	FMB640 FMC640 FMM640	Camera/Video
290	ME Pedestrian in Forward Collision Warning	1	Unsigned	0	1	-	-	0 - No forward collision warning; 1 - Forward collision warning.	FMB640 FMC640 FMM640	Camera/Video
291	ME Time Indicator	1	Unsigned	0	2	-	-	0 - Day is indicated; 1 - Break is indicated; 2 - Night is indicated.	FMB640 FMC640 FMM640	Camera/Video
292	ME Error Valid	1	Unsigned	0	1	-	-	0 - Error; 1 - No error.	FMB640 FMC640 FMM640	Camera/Video
293	ME Error Code	1	Unsigned	0	127	-	-	Error code.	FMB640 FMC640 FMM640	Camera/Video
294	ME Zero Speed	1	Unsigned	0	1	-	-	0 - Host vehicle is moving; 1 - Host vehicle is stopped.	FMB640 FMC640 FMM640	Camera/Video
295	ME Headway Valid	1	Unsigned	0	1	-	-	0 - Headway Valid is off; 1 - Headway Valid is on (when CIPV is detected).	FMB640 FMC640 FMM640	Camera/Video
296	ME Headway Measurement	1	Unsigned	0	9.9	0.1	-	Seconds	FMB640 FMC640 FMM640	Camera/Video
297	ME LDW Off	1	Unsigned	0	1	-	-	0 - LDW are enabled; 1 - LDW are disabled.	FMB640 FMC640 FMM640	Camera/Video
298	ME Left LDW On	1	Unsigned	0	1	-	-	0 - Left LDW are enabled; 1 - Left LDW are disabled.	FMB640 FMC640 FMM640	Camera/Video
299	ME Right LDW On	1	Unsigned	0	1	-	-	0 - Right LDW are enabled; 1 - Right LDW are disabled.	FMB640 FMC640 FMM640	Camera/Video
300	ME Maintenance	1	Unsigned	0	1	-	-	0 - Internal error is not detected; 1 - Internal error is detected.	FMB640 FMC640 FMM640	Camera/Video
301	ME Full Safe	1	Unsigned	0	1	-	-	0 - Full Safe indicator is off; 1 - Full Safe indicator (red) is on (blat image, saturated image, low sun, partial blockage, partial transparent).	FMB640 FMC640 FMM640	Camera/Video
302	ME PCW On	1	Unsigned	0	1	-	-	0 - PCW are disabled; 1 - PCW are enabled.	FMB640 FMC640 FMM640	Camera/Video
303	ME TSR Enabled	1	Unsigned	0	1	-	-	0 - TSR feature is disabled; 1 - TSR feature is enabled.	FMB640 FMC640 FMM640	Camera/Video
304	ME Headway Warning Request Enabled	1	Unsigned	0	1	-	-	0 - Headway Warning Request is disabled; 1 - Headway Warning Request is enabled.	FMB640 FMC640 FMM640	Camera/Video
305	ME Headway Warning Level	1	Unsigned	0	2	-	-	0 - No CIPV is present; 1 - A CIPV is present with HW = HW Config; 2 - A CIPV is present with HW = HW Config or HW = 0.6.	FMB640 FMC640 FMM640	Camera/Video
306	ME TSR Warning Level	1	Unsigned	0	7	-	-	0 - Speed <= Road Speed - 1 - Speed = Road Speed + 10-15 km/h; 2 - Speed > Road Speed + 10-15 km/h; 3 - Speed > Road Speed + 10-15 km/h; 4 - Speed > Road Speed + 10-15 km/h; 5 - Speed > Road Speed + 10-15 km/h; 6 - Speed > Road Speed + 10-15 km/h; 7 - Speed > Road Speed + 10-15 km/h and > 30 km/h.	FMB640 FMC640 FMM640	Camera/Video
307	ME Tamper Alert	1	Unsigned	0	1	-	-	0 - No tamper alert; 1 - Tamper alert.	FMB640 FMC640 FMM640	Camera/Video
308	ME High Beams	1	Unsigned	0	1	-	-	0 - OE; 1 - On.	FMB640 FMC640 FMM640	Camera/Video
309	ME Low Beams	1	Unsigned	0	1	-	-	0 - OE; 1 - On.	FMB640 FMC640 FMM640	Camera/Video
310	ME Wipers	1	Unsigned	0	1	-	-	0 - OE; 1 - On.	FMB640 FMC640 FMM640	Camera/Video

311	ME Right Signal	1	Unsigned	0	1	-	-	0 - OE 1 - On	E28560 E28561 E28562	Camera/Video
312	ME Left Signal	1	Unsigned	0	1	-	-	0 - OE 1 - On	E28560 E28561 E28562	Camera/Video
313	ME Brake Signal	1	Unsigned	0	1	-	-	0 - OE 1 - On	E28560 E28561 E28562	Camera/Video
314	ME Wipers Available	1	Unsigned	0	1	-	-	-	E28560 E28561 E28562	Camera/Video
315	ME Low Beam Available	1	Unsigned	0	1	-	-	-	E28560 E28561 E28562	Camera/Video
316	ME High Beam Available	1	Unsigned	0	1	-	-	-	E28560 E28561 E28562	Camera/Video
317	ME Speed Available	1	Unsigned	0	1	-	-	-	E28560 E28561 E28562	Camera/Video
318	ME Speed	1	Unsigned	0	255	-	km/h	-	E28560 E28561 E28562	Camera/Video
319	METS1	8	Unsigned	0	0xFFFFFFFF	-	-	Mobileye sign recognition data	E28560 E28561 E28562	Camera/Video
320	METS2	8	Unsigned	0	0xFFFFFFFF	-	-	Mobileye sign recognition data	E28560 E28561 E28562	Camera/Video
321	METS3	8	Unsigned	0	0xFFFFFFFF	-	-	Mobileye sign recognition data	E28560 E28561 E28562	Camera/Video
322	METS4	8	Unsigned	0	0xFFFFFFFF	-	-	Mobileye sign recognition data	E28560 E28561 E28562	Camera/Video
323	METS5	8	Unsigned	0	0xFFFFFFFF	-	-	Mobileye sign recognition data	E28560 E28561 E28562	Camera/Video
324	METS6	8	Unsigned	0	0xFFFFFFFF	-	-	Mobileye sign recognition data	E28560 E28561 E28562	Camera/Video
325	METS7	8	Unsigned	0	0xFFFFFFFF	-	-	Mobileye sign recognition data	E28560 E28561 E28562	Camera/Video
326	ME TSR VO	8	Unsigned	0	0xFFFFFFFF	-	-	Mobileye vision only sign type data	E28560 E28561 E28562	Camera/Video
600	ADAS Speed	1	Unsigned	0	255	-	km/h	Speed taken from ADAS 0-255km/h	E28560 E28561 E28562	Camera/Video
601	ADAS Left turn signal	1	Unsigned	0	1	-	-	Left turn signal indication 0x00 - None 0x01 - Left turn signal On	E28560 E28561 E28562	Camera/Video
605	ADAS Right turn signal	1	Unsigned	0	1	-	-	Right turn signal indication 0x00 - None	E28560 E28561 E28562	Camera/Video
603	ADAS Brake signal	1	Unsigned	0	1	-	-	Brake 0x00 - None 0x01 - Break On	E28560 E28561 E28562	Camera/Video
604	ADAS BPM	2	Unsigned	0	65535	-	-	BPM taken from ADAS	E28560 E28561 E28562	Camera/Video
605	ADAS LDW Left	1	Unsigned	0	3	-	-	"Lane departure warning Left" 0x00 - None 0x01 - Lanes crossed 0x02 - Left LDW event 0x03 - Function disabled"	E28560 E28561 E28562	Camera/Video
606	ADAS LDW Right	1	Unsigned	0	3	-	-	"Lane departure warning Right" 0x00 - None 0x01 - Lanes crossed 0x02 - Right LDW event 0x03 - Function disabled"	E28560 E28561 E28562	Camera/Video
607	ADAS Left distance	2	Unsigned	0	255	-	cm	Length of left lane (cm)	E28560 E28561 E28562	Camera/Video
608	ADAS Right distance	2	Unsigned	0	255	-	cm	Length of right lane (cm)	E28560 E28561 E28562	Camera/Video
609	ADAS Time til collision	1	Unsigned	0	255	0.1	s	Time till collision (e.g. 100-150s)	E28560 E28561 E28562	Camera/Video
610	ADAS Safety distance alert	1	Unsigned	0	3	-	-	Safety distance alert 0x00 - None 0x01 - Overlap event (behind vehicle) 0x02 - SDA event 0x03 - Function disabled	E28560 E28561 E28562	Camera/Video
611	ADAS Front vehicle start alarm	1	Unsigned	0	3	-	-	Front vehicle start alarm 0x00 - None 0x02 - PCSA event 0x03 - Function disabled	E28560 E28561 E28562	Camera/Video
612	ADAS Front proximity warning	1	Unsigned	0	3	-	-	Front proximity warning 0x00 - None 0x02 - FPW event 0x03 - Function disabled	E28560 E28561 E28562	Camera/Video
613	ADAS Front collision warning	1	Unsigned	0	3	-	-	Front proximity warning 0x00 - None 0x02 - FCW event 0x03 - Function disabled	E28560 E28561 E28562	Camera/Video
614	ADAS PCW	1	Unsigned	0	3	-	-	Proximity collision warning 0x00 - None 0x01 - Recognized 0x02 - PCW event 0x03 - Function disabled	E28560 E28561 E28562	Camera/Video
615	ADAS Record	1	Unsigned	0	2	-	-	Recording state 0x00 - None 0x01 - Recording (Mc On) 0x02 - Recording (Mc Off)	E28560 E28561 E28562	Camera/Video
616	ADAS Error code	1	Unsigned	0	2	-	-	ADAS camera error code 0x00 - None 0x01 - Low visibility 0x02 - Camera blocked	E28560 E28561 E28562	Camera/Video
617	ADAS Ahead distance	2	Unsigned	0	150	-	m	Distance to ahead object 0-150m, 255 - None	E28560 E28561 E28562	Camera/Video
618	ADAS Ahead speed	2	Unsigned	-128	126	-	km/h	Speed of object ahead	E28560 E28561 E28562	Camera/Video
619	ADAS SLR state	1	Unsigned	0	3	-	-	Speed limit recognition state 0x00 - None 0x02 - Over speed Event 0x03 - Function Disabled	E28560 E28561 E28562	Camera/Video
620	ADAS SLR Recognition	1	Unsigned	0	120	-	km/h	Speed limit recognized 0 - None	E28560 E28561 E28562	Camera/Video
621	ADAS SLR Sensitivity	1	Unsigned	0	255	-	%	Speed limit recognition sensitivity %, 255 - reserved for unknown	E28560 E28561 E28562	Camera/Video
665	ADAS SD card status	1	Unsigned	0	4	-	-	SD card status: 0x00 - SD inserted, normal operation 0x01 - SD card not detected/ not mounted 0x02 - SD card not supported / faulty 0x03 - SD card read error/ corrupt 0x04 - SD card content not available / being formatted.	E28560 E28561 E28562	Camera/Video
666	ADAS camera state	1	Unsigned	0	9	-	-	ADAS camera state: 0x00 - Unknown 0x01 - Not configured 0x02 - Error 0x03 - No communication 0x04 - Updating FW 0x05 - Downloading map/shut 0x06 - Downloading video 0x07 - Uploading to server 0x08 - Rebooting 0x09 - Resumming SD	E28560 E28561 E28562	Camera/Video
667	ADAS record data	16	HEX	0	0xFFFFFFFFFFFF	-	-	var12: 4 bits by var12: 4 bits by var12: 4 bits by var1: 8 bits by var1: 8 bits by var1: 8 bits by var1: 8 bits by var1: 8 bits by	E28560 E28561 E28562	Camera/Video
11700	DSM drowsiness event	1	Unsigned	0	1	-	-	0 - inactive, 1 - detected	E28560 E28561 E28562	Camera/Video
11704	DSM distraction event	1	Unsigned	0	1	-	-	0 - inactive, 1 - detected	E28560 E28561 E28562	Camera/Video
11702	DSM yawning event	1	Unsigned	0	1	-	-	0 - inactive, 1 - detected	E28560 E28561 E28562	Camera/Video
11703	DSM phone event	1	Unsigned	0	1	-	-	0 - inactive, 1 - detected	E28560 E28561 E28562	Camera/Video
11704	DSM smoking event	1	Unsigned	0	1	-	-	0 - inactive, 1 - detected	E28560 E28561 E28562	Camera/Video
11705	DSM driver absence event	1	Unsigned	0	1	-	-	0 - inactive, 1 - detected	E28560 E28561 E28562	Camera/Video
11706	DSM mask event	1	Unsigned	0	1	-	-	0 - inactive, 1 - detected	E28560 E28561 E28562	Camera/Video
11707	DSM G-sensor event	1	Unsigned	0	1	-	-	0 - inactive, 1 - detected	E28560 E28561 E28562	Camera/Video
11708	DSM active driver name	10	ASCII	0	10	-	-	Active driver name	E28560 E28561 E28562	Camera/Video
11709	DSM recording status	1	Unsigned	0	2	-	-	0 - None 1 - Recording (mic off) 2 - Recording (mic on)	E28560 E28561 E28562	Camera/Video
11710	DSM GPS status	1	Unsigned	0	2	-	-	0 - None 1 - Connected (no data) 2 - Connected (valid data)	E28560 E28561 E28562	Camera/Video
11711	DSM speed	1	Unsigned	0	255	-	km/h	Vehicle speed, km/h (or mi/h)	E28560 E28561 E28562	Camera/Video
11712	DSM error code	1	HEX	0	0x17	-	-	Sum of individual error values (0x00 - no error) 0x01 - Camera fail 0x02 - GPS fail 0x03 - CAN fail 0x10 - Camera blocked	E28560 E28561 E28562	Camera/Video
11713	DSM watchdog detection	1	Unsigned	0	1	-	-	0 - inactive, 1 - detected	E28560 E28561 E28562	Camera/Video
11714	DSM state	1	Unsigned	0	7	-	-	0 - unknown 1 - ready 2 - no communication 3 - updating firmware 4 - downloading map/shut 5 - uploading file to server 6 - rebooting 7 - resumming SD	E28560 E28561 E28562	Camera/Video

ContiPressureCheck TPMS

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	EWS Support	Parameter Group
				Min	Max					
10189	Total Tires	1	Unsigned	0	0xFF	-	-	TPMS Total Tires	E28560 E28561 E28562	TPMS
10190	Total Adas	1	Unsigned	0	0xFF	-	-	TPMS Total Adas	E28560 E28561 E28562	TPMS
10191	Graphical Position	8	Unsigned	0	0xFFFFFFFFFFFF	-	-	TPMS Graphical Position	E28560 E28561 E28562	TPMS
10192	Tire 1 pressure	1	HEX	0	0xFF	-	-	kPa	E28560 E28561 E28562	TPMS
10193	Tire 2 pressure	1	HEX	0	0xFF	-	-	kPa	E28560 E28561 E28562	TPMS
10194	Tire 3 pressure	1	HEX	0	0xFF	-	-	kPa	E28560 E28561 E28562	TPMS
10195	Tire 4 pressure	1	HEX	0	0xFF	-	-	kPa	E28560 E28561 E28562	TPMS
10196	Tire 5 pressure	1	HEX	0	0xFF	-	-	kPa	E28560 E28561 E28562	TPMS

10097	Tim 6 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10098	Tim 7 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10099	Tim 8 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10100	Tim 9 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10101	Tim 10 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10102	Tim 11 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10103	Tim 12 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10104	Tim 13 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10105	Tim 14 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10106	Tim 15 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10107	Tim 16 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10108	Tim 17 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10109	Tim 18 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10110	Tim 19 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10111	Tim 20 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10112	Tim 21 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10113	Tim 22 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10114	Tim 23 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10115	Tim 24 pressure	1	HEX	0	0xFF	-		kPa		FMB640 FMC640 FMM640	TPMS
10160	Tim 1 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10161	Tim 1 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10162	Tim 2 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10163	Tim 2 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10164	Tim 3 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10165	Tim 3 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10166	Tim 4 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10167	Tim 4 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10168	Tim 5 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10169	Tim 5 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10170	Tim 6 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10171	Tim 6 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10172	Tim 7 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10173	Tim 7 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10174	Tim 8 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10175	Tim 8 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10176	Tim 9 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10177	Tim 9 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10178	Tim 10 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10179	Tim 10 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10180	Tim 11 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10181	Tim 11 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10182	Tim 12 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10183	Tim 12 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10184	Tim 13 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10185	Tim 13 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10186	Tim 14 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10187	Tim 14 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10188	Tim 15 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10189	Tim 15 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10190	Tim 16 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10191	Tim 16 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10192	Tim 17 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10193	Tim 17 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10194	Tim 18 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10195	Tim 18 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10196	Tim 19 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10197	Tim 19 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10198	Tim 20 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10199	Tim 20 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10200	Tim 21 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10201	Tim 21 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10202	Tim 22 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10203	Tim 22 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10204	Tim 23 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10205	Tim 23 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS
10206	Tim 24 Temperature	1	HEX	0	0xFF	-	°C			FMB640 FMC640 FMM640	TPMS
10207	Tim 24 Warning	1	HEX	0	0xFF	-				FMB640 FMC640 FMM640	TPMS

Reefer IO

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
10045	Zone 1 Compartment state	1	Unsigned	0	15	-	-	Compartment state	FMB640 FMC640 FMM640	Reefer IO
10046	Zone 1 Compartment mode	1	Unsigned	0	255	-	-	Compartment mode	FMB640 FMC640 FMM640	Reefer IO
10047	Zone 1 Return Air Sensor 1	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 FMC640 FMM640	Reefer IO
10048	Zone 1 Supply Air Sensor 1	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 FMC640 FMM640	Reefer IO

10049	Zone 1 Set Temperature	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10050	Zone 1 Evaporator temperature	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10051	Zone 1 Return Air Sensor 2	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10052	Zone 1 Supply Air Sensor 2	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10056	Zone 2 Return Air Sensor 1	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10057	Zone 2 Supply Air Sensor 1	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10058	Zone 2 Set Temperature	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10059	Zone 2 Evaporator temperature	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10060	Zone 2 Return Air sensor 2	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10061	Zone 2 Supply Air sensor 2	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10063	Zone 3 Compartment state	1	Unsigned	0	15	-	-	Compartment state	FMB640 EMC640 EMM640	Reefer IO
10064	Zone 3 Compartment mode	1	Unsigned	0	255	-	-	Compartment mode	FMB640 EMC640 EMM640	Reefer IO
10065	Zone 3 Return Air sensor 1	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10066	Zone 3 Supply Air sensor 1	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10067	Zone 3 Set Temperature	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10068	Zone 3 Evaporator temperature	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10069	Zone 3 Return Air sensor 2	2	Signed	-32768	32767	0,1	°C	Degrees, °C	FMB640 EMC640 EMM640	Reefer IO
10070	Zone 3 Supply Air sensor 2	2	Signed	-32768	32767	0,1	°C	Supply Air sensor 2	FMB640 EMC640 EMM640	Reefer IO
10071	Zone 3 Operating Mode	1	Unsigned	0	7	-	-	Speed mode	FMB640 EMC640 EMM640	Reefer IO
10350	Ambient Air Temperature	2	Signed	-18382	18026	0,1	°C	Ambient Air Temperature	FMB640 EMC640 EMM640	Reefer IO
10351	Compressor Coolant Temperature	2	Signed	-18382	18026	0,1	°C	Compressor Coolant Temperature in celsius degrees multiplied by 10	FMB640 EMC640 EMM640	Reefer IO
10353	Compressor Config	2	Unsigned	0	20000	-	-	RPM	FMB640 EMC640 EMM640	Reefer IO
10356	Installation Serial	8	Unsigned	0	0xffffffff	-	String	Fridge Installation Serial String	FMB640 EMC640 EMM640	Reefer IO
10468	Analog Input 1	2	Unsigned	0	0xffff	-	V	Analog Input 1	FMB640 EMC640 EMM640	Reefer IO
10469	Analog Input 2	2	Unsigned	0	0xffff	-	V	Analog Input 2	FMB640 EMC640 EMM640	Reefer IO
10470	Analog Input 3	2	Unsigned	0	0xffff	-	V	Analog Input 3	FMB640 EMC640 EMM640	Reefer IO
10472	Manufacturer ID	1	Unsigned	0	0xff	-	-	Fridge ID	FMB640 EMC640 EMM640	Reefer IO
10473	Battery State Flags	1	Unsigned	0	0xff	-	enum (bit field)	Battery Flags bit0-Available bit1-Error bit2-Alarm bit3-DigitalSensor	FMB640 EMC640 EMM640	Reefer IO
10474	Fuel state flags	1	Unsigned	0	0xff	-	enum (bit field)	Fuel flags bit0-Available bit1-Error bit2-Alarm bit3-DigitalSensor	FMB640 EMC640 EMM640	Reefer IO
10475	Maintenance 1 Hours	4	Unsigned	0	0xffffffff	-	h	Maintenance 1 Hours	FMB640 EMC640 EMM640	Reefer IO
10476	Maintenance 2 Hours	4	Unsigned	0	0xffffffff	-	h	Maintenance 2 Hours	FMB640 EMC640 EMM640	Reefer IO
10477	Maintenance 3 Hours	4	Unsigned	0	0xffffffff	-	h	Maintenance 3 Hours	FMB640 EMC640 EMM640	Reefer IO
10478	Maintenance 4 Hours	4	Unsigned	0	0xffffffff	-	h	Maintenance 4 Hours	FMB640 EMC640 EMM640	Freezer IO Elements
10479	Maintenance 5 Hours	4	Unsigned	0	0xffffffff	-	h	Maintenance 5 Hours	FMB640 EMC640 EMM640	Reefer IO
10480	Run Mode	1	Unsigned	0	0xff	-	-	Run Mode 0:Start/Stop (SS) 1:Continuous 2:Cycle/Center (CS) 7:Unknown/Now available	FMB640 EMC640 EMM640	Reefer IO
10639	Error Codes	16	HEX	0	16	-	-	Fridge error codes array	FMB640 EMC640 EMM640	Reefer IO
10644	Temperature Probe 1	2	Signed	-32768	32767	-	-	Temperature Probe 1	FMB640 EMC640 EMM640	Reefer IO
10645	Temperature Probe 2	2	Signed	-32768	32767	-	-	Temperature Probe 2	FMB640 EMC640 EMM640	Reefer IO
10646	Temperature Probe 3	2	Signed	-32768	32767	-	-	Temperature Probe 3	FMB640 EMC640 EMM640	Reefer IO
10647	Temperature Probe 4	2	Signed	-32768	32767	-	-	Temperature Probe 4	FMB640 EMC640 EMM640	Reefer IO
10648	Temperature Probe 5	2	Signed	-32768	32767	-	-	Temperature Probe 5	FMB640 EMC640 EMM640	Reefer IO
10649	Temperature Probe 6	2	Signed	-32768	32767	-	-	Temperature Probe 6	FMB640 EMC640 EMM640	Reefer IO
10040	Inbox Fuel	1	Unsigned	0	15	-	-	-	FMB640 EMC640 EMM640	Reefer IO
10041	Inbox Battery	2	Unsigned	0	15	-	-	-	FMB640 EMC640 EMM640	Reefer IO
10042	Inbox TELH	4	Unsigned	0	15	-	-	-	FMB640 EMC640 EMM640	Reefer IO
10043	Inbox TVH	4	Unsigned	0	15	-	-	-	FMB640 EMC640 EMM640	Reefer IO
10044	Inbox TENH	4	Unsigned	0	15	-	-	-	FMB640 EMC640 EMM640	Reefer IO
10053	Z1 Power mode	1	Unsigned	0	7	-	-	Zone 1 Operating Mode	FMB640 EMC640 EMM640	Reefer IO

10054	Zone 2 Compartment state	1	Unsigned	0	15	-	-	Alarm Type	EMB640 EMC640 EMM640	Reefer IO
10055	Zone 2 Compartment mode	1	Unsigned	0	255	-	-	Alarm Code	EMB640 EMC640 EMM640	Reefer IO
10352	Alarm level	1	Unsigned	0	255	-	-	Error Count	EMB640 EMC640 EMM640	Reefer IO
10354	Communication state flags	1	Unsigned	0	255	-	-	Compressor CFG	EMB640 EMC640 EMM640	Reefer IO
10355	Door Status	1	Unsigned	0	255	-	-	Door Status	EMB640 EMC640 EMM640	Reefer IO
10357	Trailer Serial	8	Unsigned	0	0xffffffffffff	-	-	Trailer Serial String	EMB640 EMC640 EMM640	Reefer IO
10357	Trailer Serial	8	Unsigned	0	0xffffffffffff	-	-	Trailer Serial String	EMB640 EMC640 EMM640	Reefer IO
10481	External Temperature 1	2	Signed	-32768	32768	-	°C	External Temperature 1	EMB640 EMC640 EMM640	Reefer IO
10482	External Temperature 2	2	Signed	-32768	32768	-	°C	External Temperature 2	EMB640 EMC640 EMM640	Reefer IO
10483	External Temperature 3	2	Signed	-32768	32768	-	°C	External Temperature 3	EMB640 EMC640 EMM640	Reefer IO
10484	External Temperature 4	2	Signed	-32768	32768	-	°C	External Temperature 4	EMB640 EMC640 EMM640	Reefer IO
10485	External Temperature 5	2	Signed	-32768	32768	-	°C	External Temperature 5	EMB640 EMC640 EMM640	Reefer IO
10486	External Temperature 6	2	Signed	-32768	32768	-	°C	External Temperature 6	EMB640 EMC640 EMM640	Reefer IO

TK Transcan IO

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
10683	Temperature 1	2	Signed	-32768	32767	0.1	°C	Temperature 1	EMB640 EMC640 EMM640	Transcan IO
10684	Temperature 2	2	Signed	-32768	32767	0.1	°C	Temperature 2	EMB640 EMC640 EMM640	Transcan IO
10685	Temperature 3	2	Signed	-32768	32767	0.1	°C	Temperature 3	EMB640 EMC640 EMM640	Transcan IO
10686	Temperature 4	2	Signed	-32768	32767	0.1	°C	Temperature 4	EMB640 EMC640 EMM640	Transcan IO
10687	Status 1	1	Unsigned	0	255	0		Status 1	EMB640 EMC640 EMM640	Transcan IO
10688	Status 2	1	Unsigned	0	255	0		Status 2	EMB640 EMC640 EMM640	Transcan IO
10689	Status 3	1	Unsigned	0	255	0		Status 3	EMB640 EMC640 EMM640	Transcan IO
10690	Status 4	1	Unsigned	0	255	0		Status 4	EMB640 EMC640 EMM640	Transcan IO
10691	Alarm 1	1	Unsigned	0	255	0		Alarm 1	EMB640 EMC640 EMM640	Transcan IO
10692	Alarm 2	1	Unsigned	0	255	0		Alarm 2	EMB640 EMC640 EMM640	Transcan IO
10693	Alarm 3	1	Unsigned	0	255	0		Alarm 3	EMB640 EMC640 EMM640	Transcan IO
10694	Alarm 4	1	Unsigned	0	255	0		Alarm 4	EMB640 EMC640 EMM640	Transcan IO

TK Euroscan IO

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
484	External Sensor Temperature 1	2	Signed	-32768	32767	-	°C	Degrees, °C	EMB640 EMC640 EMM640	Euroscan IO
485	External Sensor Temperature 2	2	Signed	-32768	32767	-	°C	Degrees, °C	EMB640 EMC640 EMM640	Euroscan IO
486	External Sensor Temperature 3	2	Signed	-32768	32767	-	°C	Degrees, °C	EMB640 EMC640 EMM640	Euroscan IO
487	External Sensor Temperature 4	2	Signed	-32768	32767	-	°C	Degrees, °C	EMB640 EMC640 EMM640	Euroscan IO
488	External Sensor Temperature 5	2	Signed	-32768	32767	-	°C	Degrees, °C	EMB640 EMC640 EMM640	Euroscan IO
489	External Sensor Temperature 6	2	Signed	-32768	32767	-	°C	Degrees, °C	EMB640 EMC640 EMM640	Euroscan IO
10464	External Digital Sensor 1	1	Unsigned	0	0xff	-	-	Logic 0/1	EMB640 EMC640 EMM640	Euroscan IO
10465	External Digital Sensor 2	1	Unsigned	0	0xff	-	-	Logic 0/1	EMB640 EMC640 EMM640	Euroscan IO
10466	External Digital Sensor 3	1	Unsigned	0	0xff	-	-	Logic 0/1	EMB640 EMC640 EMM640	Euroscan IO
10467	External Digital Sensor 4	1	Unsigned	0	0xff	-	-	Logic 0/1	EMB640 EMC640 EMM640	Euroscan IO

TK Touchprint IO

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
10695	Input 1	2	Signed	-32768	32767	0.1	°C	Input 1	FMB640 FMC640 FMM640	TK Touchprint IO
10696	Input 2	2	Signed	-32768	32767	0.1	°C	Input 2	FMB640 FMC640 FMM640	TK Touchprint IO
10697	Input 3	2	Signed	-32768	32767	0.1	°C	Input 3	FMB640 FMC640 FMM640	TK Touchprint IO
10698	Input 4	2	Signed	-32768	32767	0.1	°C	Input 4	FMB640 FMC640 FMM640	TK Touchprint IO
10699	Input 5	2	Signed	-32768	32767	0.1	°C	Input 5	FMB640 FMC640 FMM640	TK Touchprint IO
10700	Input 6	2	Signed	-32768	32767	0.1	°C	Input 6	FMB640 FMC640 FMM640	TK Touchprint IO
10701	Setpoint 1	2	Signed	-32768	32767	0.1	°C	Setpoint 1	FMB640 FMC640 FMM640	TK Touchprint IO
10702	Setpoint 2	2	Signed	-32768	32767	0.1	°C	Setpoint 2	FMB640 FMC640 FMM640	TK Touchprint IO
10703	Setpoint 3	2	Signed	-32768	32767	0.1	°C	Setpoint 3	FMB640 FMC640 FMM640	TK Touchprint IO

BLE

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
701	BLE Temperature 1	2	Signed	0	0xFFFF	-	-		FMB640	BLE elements
702	BLE Temperature 2	2	Signed	0	0xFFFF	-	-		FMC640	BLE elements
703	BLE Temperature 3	2	Signed	0	0xFFFF	-	-		FMM640	BLE elements
704	BLE Temperature 4	2	Signed	0	0xFFFF	-	-		FMB640	BLE elements
705	BLE Battery 1	1	Unsigned	0	0xFF	-	-		FMC640	BLE elements
706	BLE Battery 2	1	Unsigned	0	0xFF	-	-		FMM640	BLE elements
707	BLE Battery 3	1	Unsigned	0	0xFF	-	-		FMB640	BLE elements
708	BLE Battery 4	1	Unsigned	0	0xFF	-	-		FMC640	BLE elements
709	BLE Humidity 1	2	Unsigned	0	0xFFFF	-	-		FMM640	BLE elements
710	BLE Humidity 2	2	Unsigned	0	0xFFFF	-	-		FMB640	BLE elements
711	BLE Humidity 3	2	Unsigned	0	0xFFFF	-	-		FMC640	BLE elements
712	BLE Humidity 4	2	Unsigned	0	0xFFFF	-	-		FMM640	BLE elements
713	BLE Sensor Custom 1	8	Unsigned	0	0xFFFFFFFFFFFFFF	-	-		FMB640	BLE elements
714	BLE Sensor Custom 2	8	Unsigned	0	0xFFFFFFFFFFFFFF	-	-		FMC640	BLE elements
715	BLE Sensor Custom 3	8	Unsigned	0	0xFFFFFFFFFFFFFF	-	-		FMM640	BLE elements
716	BLE Sensor Custom 4	8	Unsigned	0	0xFFFFFFFFFFFFFF	-	-		FMB640	BLE elements
717	BLE Ilum 1	2	Unsigned	0	0xFFFF	-	-		FMC640	BLE elements
718	BLE Ilum 2	2	Unsigned	0	0xFFFF	-	-		FMM640	BLE elements
719	BLE Ilum 3	2	Unsigned	0	0xFFFF	-	-		FMB640	BLE elements
720	BLE Ilum 4	2	Unsigned	0	0xFFFF	-	-		FMC640	BLE elements
721	BLE LLS Fuel 1	2	Unsigned	0	0xFFFF	-	-		FMM640	BLE elements
722	BLE LLS Fuel 2	2	Unsigned	0	0xFFFF	-	-		FMB640	BLE elements
723	BLE LLS Fuel 3	2	Unsigned	0	0xFFFF	-	-		FMC640	BLE elements
724	BLE LLS Fuel 4	2	Unsigned	0	0xFFFF	-	-		FMM640	BLE elements
725	BLE Freq 1	4	Unsigned	0	0xFFFFFFFF	-	-		FMB640	BLE elements
726	BLE Freq 2	4	Unsigned	0	0xFFFFFFFF	-	-		FMC640	BLE elements
727	BLE Freq 3	4	Unsigned	0	0xFFFFFFFF	-	-		FMM640	BLE elements
728	BLE Freq 4	4	Unsigned	0	0xFFFFFFFF	-	-		FMB640	BLE elements
729	BLE Sensor Custom 12	4	Unsigned	0	0xFFFFFFFF	-	-		FMC640	BLE elements
730	BLE Sensor Custom 13	4	Unsigned	0	0xFFFFFFFF	-	-		FMM640	BLE elements
731	BLE Sensor Custom 14	4	Unsigned	0	0xFFFFFFFF	-	-		FMB640	BLE elements
732	BLE Sensor Custom 15	4	Unsigned	0	0xFFFFFFFF	-	-		FMC640	BLE elements
733	BLE Sensor Custom 22	4	Unsigned	0	0xFFFFFFFF	-	-		FMM640	BLE elements
734	BLE Sensor Custom 23	4	Unsigned	0	0xFFFFFFFF	-	-		FMB640	BLE elements
735	BLE Sensor Custom 24	4	Unsigned	0	0xFFFFFFFF	-	-		FMC640	BLE elements
736	BLE Sensor Custom 25	4	Unsigned	0	0xFFFFFFFF	-	-		FMM640	BLE elements
737	BLE Sensor Custom 32	4	Unsigned	0	0xFFFFFFFF	-	-		FMB640	BLE elements
738	BLE Sensor Custom 33	4	Unsigned	0	0xFFFFFFFF	-	-		FMC640	BLE elements
739	BLE Sensor Custom 34	4	Unsigned	0	0xFFFFFFFF	-	-		FMM640	BLE elements
740	BLE Sensor Custom 35	4	Unsigned	0	0xFFFFFFFF	-	-		FMB640	BLE elements
741	BLE Sensor Custom 42	4	Unsigned	0	0xFFFFFFFF	-	-		FMC640	BLE elements
742	BLE Sensor Custom 43	4	Unsigned	0	0xFFFFFFFF	-	-		FMM640	BLE elements
743	BLE Sensor Custom 44	4	Unsigned	0	0xFFFFFFFF	-	-		FMB640	BLE elements
744	BLE Sensor Custom 45	4	Unsigned	0	0xFFFFFFFF	-	-		FMC640	BLE elements
10500	BLE Advertisement data	Variable	HEX	0	1024	-	-	List of parsed advertising data of BLE beacons (Edbyts and ibs) found by BLE scanning	FMB640	BLE elements
548	Advanced BLE Advertisement data	Variable	HEX	0	1024	-	-	List of parsed advertising data of BLE beacons (Edbyts and ibs) found by BLE scanning	FMC640	BLE elements

FMS Eco Driving

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
12000	Event IO ID	1	Unsigned	0	0xFF	-	-	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	FMB640 FMC640 FMM640	FMS Eco Driving elements
239	Ignition	1	Unsigned	0	0xFF	-	-	0 - OFF 1 - ON 0 - Non active 1 - Active	FMB640 FMC640 FMM640	FMS Eco Driving elements
250	Trip	1	Unsigned	0	0xFF	-	-	0 - Non active 1 - Active	FMB640 FMC640 FMM640	FMS Eco Driving elements
192	Total Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
138	Engine Fuel used	4	Unsigned	0	0xFFFFFFFF	-	ml	Milliliters, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements

12001	Active Driver ID	-	<string>	0	0xFF	-	-	var	FMB640 FMC640 FMM640	FMS Eco Driving elements
12002	VIN Number	-	<string>	0	0xFF	-	-	var	FMB640 FMC640 FMM640	FMS Eco Driving elements
12003	Event Counter	2	Unsigned	0	0xFFFF	-	-		FMB640 FMC640 FMM640	FMS Eco Driving elements
12010	Coasting Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12011	Coasting Fuel Used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12012	Coasting Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12013	EcoRoll Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12014	EcoRoll Fuel Used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12015	EcoRoll Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12016	Braking Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12017	Braking Fuel Used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12018	Braking Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12019	Braking Count	4	Unsigned	0	0xFFFFFFFF	-	-	Number	FMB640 FMC640 FMM640	FMS Eco Driving elements
12020	Retarder Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12021	Retarder Fuel Used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12022	Retarder Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12023	Cruise Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12024	Cruise Fuel Used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12025	Cruise Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12026	Torque Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12027	Torque Fuel Used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12028	Torque Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12029	PTO Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12030	PTO Fuel Used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12031	PTO Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12032	Fuel While Driving fuel	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12033	Fuel While Idle fuel	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12034	Engine Load fuel	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12035	Total Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12036	Total Fuel Used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12037	Total Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12050	Short Stops Count	2	Unsigned	0	0xFFFF	-	-	Number	FMB640 FMC640 FMM640	FMS Eco Driving elements
12051	Long Stops Count	2	Unsigned	0	0xFFFF	-	-	Number	FMB640 FMC640 FMM640	FMS Eco Driving elements
12052	Parking brake Count	2	Unsigned	0	0xFFFF	-	-	Number	FMB640 FMC640 FMM640	FMS Eco Driving elements
12053	Harsh Acceleration Count	2	Unsigned	0	0xFFFF	-	-	Number	FMB640 FMC640 FMM640	FMS Eco Driving elements
12054	Harsh Braking Count	2	Unsigned	0	0xFFFF	-	-	Number	FMB640 FMC640 FMM640	FMS Eco Driving elements
12055	Harsh Cornering Count	2	Unsigned	0	0xFFFF	-	-	Number	FMB640 FMC640 FMM640	FMS Eco Driving elements
12100	Speed Range 1 Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12101	Speed Range 2 Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12102	Speed Range 3 Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12103	Speed Range 4 Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12104	Speed Range 5 Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12105	Speed Range 6 Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12106	Speed Range 7 Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12107	Speed Range 8 Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements
12108	Speed Range 9 Distance	4	Unsigned	0	0xFFFFFFFF	-	m	Meters, m	FMB640 FMC640 FMM640	FMS Eco Driving elements

12201	Braking Range 2 Fuel used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12202	Braking Range 3 Fuel used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12203	Braking Range 4 Fuel used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12204	Braking Range 5 Fuel used	4	Unsigned	0	0xFFFFFFFF	-	-ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12205	Braking Range 6 Fuel used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12206	Braking Range 7 Fuel used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12207	Braking Range 8 Fuel used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12208	Braking Range 9 Fuel used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12209	Braking Range 10 Fuel used	4	Unsigned	0	0xFFFFFFFF	-	ml	Millilitres, ml	FMB640 FMC640 FMM640	FMS Eco Driving elements
12210	Braking Range 1 Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12211	Braking Range 2 Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12212	Braking Range 3 Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12213	Braking Range 4 Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12214	Braking Range 5 Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12215	Braking Range 6 Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12216	Braking Range 7 Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12217	Braking Range 8 Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12218	Braking Range 9 Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements
12219	Braking Range 10 Time	4	Unsigned	0	0xFFFFFFFF	-	s	Seconds, s	FMB640 FMC640 FMM640	FMS Eco Driving elements