

TST100 AVL ID List

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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	TFT100 TST100 [Expand] TMT250 GH5200	Permanent I/O elements
240	Movement	1	Unsigned	0	1	-	-	0 - Movement Off 1 - Movement On	TFT100 TAT100 TAT140 TAT141 TAT240 [Expand] TMT250 GH5200	Permanent I/O elements
80	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	TFT100 TAT100 TAT140 TAT141 TAT240 TMT250 GH5200	Permanent I/O elements
21	GSM Signal	1	Unsigned	0	5	-	-	Value in scale 1-5	TFT100 TST100 TAT100 TAT141 TAT240	Permanent I/O elements
200	Sleep Mode	1	Unsigned	0	4	-	-	0 - Sleep modes disabled 1 - GNSS sleep 2 - Deep sleep 3 - Online deep sleep 4 - Ultra deep sleep	TMT250 GH5200 TFT100 TST100	Permanent I/O elements
69	GNSS Status	1	Unsigned	0	3	-	-	0 - GNSS OFF 1 - GNSS ON with fix 2 - GNSS ON without fix 3 - GNSS sleep	TMT250 GH5200 TFT100 TST100 TAT100 TAT141 TAT240	Permanent I/O elements

181	GNSS PDOP	2	Unsigned	0	500	0.1	-	Probability	TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141 TAT240	Permanent I/O elements
182	GNSS HDOP	2	Unsigned	0	500	0.1	-	Probability	TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141 TAT240	Permanent I/O elements
24	Speed	2	Unsigned	0	350	-	km/h	Value	TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141 TAT240	Permanent I/O elements
205	GSM Cell ID	2	Unsigned	0	65535	-	-	GSM base station ID	TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141 TAT240	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.	TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141 TAT240	Permanent I/O elements
67	Battery Voltage	2	Unsigned	0	65535	0.001	V	Voltage	TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141 TAT240	Permanent I/O elements
68	Battery Current	2	Unsigned	0	65535	0.001	A	Current	TMT250 GH5200 TFT100 TST100	Permanent I/O elements
113	Battery Level	1	Unsigned	0	100	-	%	Battery capacity level	TMT250 GH5200 TST100 TFT100	Permanent I/O elements
66	External Voltage	2	Unsigned	0	65535	0.001	V	IO element is used to measure External Voltage, when External Voltage is < 65V.	TFT100 TST100	Permanent I/O elements
800	Extended External Voltage	4	Unsigned	0	0xFFFF	-	V	IO element is used to measure External Voltage, when External Voltage is > 65 V.	TFT100	Permanent I/O elements
241	Active GSM Operator	4	Unsigned	0	4294967295	-	-	Currently used GSM Operator code	TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141 TAT240	Permanent I/O elements
199	Trip Odometer	4	Unsigned	0	2147483647	-	m	Trip Odometer value	TMT250 GH5200 TFT100 TST100	Permanent I/O elements
16	Total Odometer	4	Unsigned	0	2147483647	-	m	Total Odometer value	TMT250 GH5200 TFT100 TST100	Permanent I/O elements
1	Digital Input 1	1	Unsigned	0	1	-	-	Logic: 0/1	TFT100	Permanent I/O elements
2	Digital Input 2	1	Unsigned	0	1	-	-	Logic: 0/1	TFT100	Permanent I/O elements
3	Digital Input 3	1	Unsigned	0	1	-	-	Logic: 0/1	TFT100	Permanent I/O elements

262	Digital Input 4	1	Unsigned	0	1	-	-	Logic: 0/1	TFT100	Permanent I/O elements
179	Digital Output 1	1	Unsigned	0	1	-	-	Logic: 0/1	TFT100	Permanent I/O elements
180	Digital Output 2	1	Unsigned	0	1	-	-	Logic 0/1	TFT100	Permanent I/O elements
841	DOUT 1 Overcurrent	1	Unsigned	0	1	-	-	DOUT 1 Overcurrent IO element is used to indicate overcurrent on Digital Output 1. When Digital Output 1 overcurrent happens, it means that current level is > 300 mA, value is set to 1. Value 1 holds until 5 min timeout runs out. After timeout value is set to 0 if current level is < 300 mA. If current level is still > 300 mA value remains 1.	TFT100	Permanent I/O elements
842	DOUT2 Overcurrent	1	Unsigned	0	1	-	-	DOUT 2 Overcurrent IO element is used to indicate overcurrent on Digital Output 2. When Digital Output 2 overcurrent happens, it means that current level is > 300 mA, value is set to 1. Value 1 holds until 5 min timeout runs out. After timeout value is set to 0 if current level is < 300 mA. If current level is still > 300 mA value remains 1.	TFT100	Permanent I/O elements
9	Analog Input 1	2	Unsigned	0	65535	0.001	V	Voltage	TFT100	Permanent I/O elements
6	Analog Input 2	2	Unsigned	0	65535	0.001	V	Voltage	TFT100	Permanent I/O elements
839	Extended Analog Input 1	4	Unsigned	0	0xFFFF	-	V	Extended Analog Input 1 IO element is used to measure Analog Input 1 voltage, when Analog Input 1 voltage is > 65 V.	TFT100	Permanent I/O elements
840	Extended Analog Input 2	4	Unsigned	0	0xFFFF	-	V	Extended Analog Input 2 IO element is used to measure Analog Input 2 voltage, when Analog Input 1 voltage is > 65 V.	TFT100	Permanent I/O elements
303	Instant Movement	1	Unsigned	0	1	-	-	Logic: 0/1 returns movement value	TMT250 GH5200 TST100 TFT100 TAT100 TAT140 TAT240	Permanent I/O elements
17	Axis X	2	Signed	-8000	8000	0.001	G	X axis value	TMT250 GH5200 TFT100 TST100	Permanent I/O elements
18	Axis Y	2	Signed	-8000	8000	0.001	G	Y axis value	TMT250 GH5200 TFT100 TST100	Permanent I/O elements
19	Axis Z	2	Signed	-8000	8000	0.001	G	Z axis value	TMT250 GH5200 TFT100 TST100	Permanent I/O elements
11	ICCID1	8	Unsigned	0	0xffffffffffffff	-	-	Value of SIM ICCID, MSB	TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT240	Permanent I/O elements
14	ICCID2	8	Unsigned	0	0xffffffffffffff	-	-	Value of SIM ICCID, MSB	TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT240	Permanent I/O elements
72	Dallas Temperature 1	4	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	TFT100	Permanent I/O elements
73	Dallas Temperature 2	4	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	TFT100	Permanent I/O elements

74	Dallas Temperature 3	4	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	TFT100	Permanent I/O elements
75	Dallas Temperature 4	4	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	TFT100	Permanent I/O elements
76	Dallas Temperature ID 1	8	Unsigned	0	0xffffffffffffff	-	-	Dallas sensor ID	TFT100	Permanent I/O elements
77	Dallas Temperature ID 2	8	Unsigned	0	0xffffffffffffff	-	-	Dallas sensor ID	TFT100	Permanent I/O elements
79	Dallas Temperature ID 3	8	Unsigned	0	0xffffffffffffff	-	-	Dallas sensor ID	TFT100	Permanent I/O elements
71	Dallas Temperature ID 4	8	Unsigned	0	0xffffffffffffff	-	-	Dallas sensor ID	TFT100	Permanent I/O elements
78	iButton	8	Unsigned	0	0xffffffffffffff	-	-	iButton ID	TFT100	Permanent I/O elements
15	Eco Score	2	Unsigned	0	65535	0.01	-	Average amount of events on some distance	TFT100	Permanent I/O elements
116	Charger Connected	1	Unsigned	0	1	-	-	0 - charger is not connected 1 - charger is connected	TMT250 GH5200	Permanent I/O elements
854	User ID	4	Unsigned	0	0xFFFFFFFF	-	-	This parameter allows to send custom number as AVL ID parameter. Configurable in Features section.	TMT250 GH5200	Permanent I/O elements
387	ISO6709 Coordinates	34	HEX	0	0x7fffffffffffff	-	-	ISO6709 Coordinates Latitude, Longitude (in Degrees, Minutes and Seconds) and Altitude: IO value format: ±DDMMSS.SSSS±DDMMSS.SSSS±AAA.AAA/	[Expand] TMT250 GH5200 TST100 TFT100 TAT100 TAT140 TAT141 TAT240	Permanent I/O elements
636	LTE Cell ID	4	Unsigned	0	4294967295	-	-	LTE Cell ID	TAT140 TAT141 TAT240	Permanent I/O elements
288	GSM Cell ID 1	2	Unsigned	0	65535	-	-	Unique ID of the Cell 1	TAT100	Permanent I/O elements
291	GSM Cell ID 2	2	Unsigned	0	65535	-	-	Unique ID of the Cell 2	TAT100	Permanent I/O elements
294	GSM Cell ID 3	2	Unsigned	0	65535	-	-	Unique ID of the Cell 3	TAT100	Permanent I/O elements
297	GSM Cell ID 4	2	Unsigned	0	65535	-	-	Unique ID of the Cell 4	TAT100	Permanent I/O elements
287	GSM Cell LAC 1	2	Unsigned	0	65534	-	-	Location Area Code of the Cell 1	TAT100	Permanent I/O elements
290	GSM Cell LAC 2	2	Unsigned	0	65534	-	-	Location Area Code of the Cell 2	TAT100	Permanent I/O elements
293	GSM Cell LAC 3	2	Unsigned	0	65534	-	-	Location Area Code of the Cell 3	TAT100	Permanent I/O elements
296	GSM Cell LAC 4	2	Unsigned	0	65534	-	-	Location Area Code of the Cell 4	TAT100	Permanent I/O elements
1200	GSM Cell MNC 1	1	Unsigned	-	-	-	-	Mobile Network Code of the Cell 1	TAT100	Permanent I/O elements
1201	GSM Cell MNC 2	1	Unsigned	-	-	-	-	Mobile Network Code of the Cell 2	TAT100	Permanent I/O elements
1202	GSM Cell MNC 3	1	Unsigned	-	-	-	-	Mobile Network Code of the Cell 3	TAT100	Permanent I/O elements
1203	GSM Cell MNC 4	1	Unsigned	-	-	-	-	Mobile Network Code of the Cell 4	TAT100	Permanent I/O elements
286	GSM Signal RX 0	1	Unsigned	0	63	-	-	GSM Signal of the Cell 0	TAT100	Permanent I/O elements
289	GSM Signal RX 1	1	Unsigned	0	63	-	-	GSM Signal of the Cell 1	TAT100	Permanent I/O elements
292	GSM Signal RX 2	1	Unsigned	0	63	-	-	GSM Signal of the Cell 2	TAT100	Permanent I/O elements
295	GSM Signal RX 3	1	Unsigned	0	63	-	-	GSM Signal of the Cell 3	TAT100	Permanent I/O elements
298	GSM Signal RX 4	1	Unsigned	0	63	-	-	GSM Signal of the Cell 4	TAT100	Permanent I/O elements

25021	LTE Cell ID 1	4	Unsigned	0	4294967295	-	-	Unique ID of the LTE Cell 1	TAT140 TAT141	Permanent I/O elements
25024	LTE Cell ID 2	4	Unsigned	0	4294967295	-	-	Unique ID of the LTE Cell 2	TAT140 TAT141	Permanent I/O elements
25027	LTE Cell ID 3	4	Unsigned	0	4294967295	-	-	Unique ID of the LTE Cell 3	TAT140 TAT141	Permanent I/O elements
25030	LTE Cell ID 4	4	Unsigned	0	4294967295	-	-	Unique ID of the LTE Cell 4	TAT140 TAT141	Permanent I/O elements
25020	LTE Cell LAC 1	2	Unsigned	0	65534	-	-	Location Area Code of the LTE Cell 1	TAT140 TAT141	Permanent I/O elements
25023	LTE Cell LAC 2	2	Unsigned	0	65534	-	-	Location Area Code of the LTE Cell 2	TAT140 TAT141	Permanent I/O elements
25026	LTE Cell LAC 3	2	Unsigned	0	65534	-	-	Location Area Code of the LTE Cell 3	TAT140 TAT141	Permanent I/O elements
25029	LTE Cell LAC 4	2	Unsigned	0	65534	-	-	Location Area Code of the LTE Cell 4	TAT140 TAT141	Permanent I/O elements
25032	LTE Cell MNC 1	1	Unsigned	-	-	-	-	LTE Mobile Network Code of the Cell 1	TAT140 TAT141	Permanent I/O elements
25033	LTE Cell MNC 2	1	Unsigned	-	-	-	-	LTE Mobile Network Code of the Cell 2	TAT140 TAT141	Permanent I/O elements
25034	LTE Cell MNC 3	1	Unsigned	-	-	-	-	LTE Mobile Network Code of the Cell 3	TAT140 TAT141	Permanent I/O elements
25035	LTE Cell MNC 4	1	Unsigned	-	-	-	-	LTE Mobile Network Code of the Cell 4	TAT140 TAT141	Permanent I/O elements
25019	LTE Signal RX 0	1	Unsigned	0	7	-	-	LTE Signal of the Cell 0	TAT140 TAT141	Permanent I/O elements
25022	LTE Signal RX 1	1	Unsigned	0	7	-	-	LTE Signal of the Cell 1	TAT140 TAT141	Permanent I/O elements
25025	LTE Signal RX 2	1	Unsigned	0	7	-	-	LTE Signal of the Cell 2	TAT140 TAT141	Permanent I/O elements
25028	LTE Signal RX 3	1	Unsigned	0	7	-	-	LTE Signal of the Cell 3	TAT140 TAT141	Permanent I/O elements
25031	LTE Signal RX 4	1	Unsigned	0	7	-	-	LTE Signal of the Cell 4	TAT140 TAT141	Permanent I/O elements
399	Time To First Fix	1	Unsigned	0	4294967295	-	s	Amount of time it took to get first GNSS fix	TAT100 TAT140 TAT141 TAT240	Permanent I/O elements
20015	Modem Uptime	1	Unsigned	0	4294967295	-	s	Modem Uptime since the last wake up	TAT100 TAT140 TAT141 TAT240	Permanent I/O elements
25015	Modem Uptime	8	Unsigned	0	4294967295	-	s	Modem Uptime since the last wake up (from FW X.4.10.Rev.00)	TAT100 TAT140 TAT141 TAT240	Permanent I/O elements
20016	LTE RSRP	2	Signed	-140	-44	-	dBm	Reference Signals Received Power	TAT140	Permanent I/O elements
20017	LTE RSRQ	1	Signed	-3	-20	-	dB	Reference Signals Received Quality	TAT140	Permanent I/O elements
25016	LTE RSRP	2	Signed	-140	-44	-	dBm	Reference Signals Received Power (from FW X.4.10.Rev.00)	TAT140 TAT141 TAT240	Permanent I/O elements
25017	LTE RSRQ	1	Signed	-20	-3	-	dB	Reference Signals Received Quality (from FW X.4.10.Rev.00)	TAT140 TAT141 TAT240	Permanent I/O elements
449	Ignition On Counter value		Unsigned	0	2147483647	-	s	Current value of the counter	TFT100	Permanent I/O elements
10800	EYE Temperature 1	2	Signed	-32768	32767	0.01	°C	Temperature measured by EYE Sensor 1	TFT100 TMT250 GH5200	Permanent I/O elements
10801	EYE Temperature 2	2	Signed	-32768	32767	0.01	°C	Temperature measured by EYE Sensor 2	TFT100 TMT250 GH5200	Permanent I/O elements
10802	EYE Temperature 3	2	Signed	-32768	32767	0.01	°C	Temperature measured by EYE Sensor 3	TFT100 TMT250 GH5200	Permanent I/O elements
10803	EYE Temperature 4	2	Signed	-32768	32767	0.01	°C	Temperature measured by EYE Sensor 4	TFT100 TMT250 GH5200	Permanent I/O elements
10804	EYE Humidity 1	1	Unsigned	0	100	-	%	Humidity measured by EYE Sensor 1	TFT100 TMT250 GH5200	Permanent I/O elements
10805	EYE Humidity 2	1	Unsigned	0	100	-	%	Humidity measured by EYE Sensor 2	TFT100 TMT250 GH5200	Permanent I/O elements
10806	EYE Humidity 3	1	Unsigned	0	100	-	%	Humidity measured by EYE Sensor 3	TFT100 TMT250 GH5200	Permanent I/O elements

10807	EYE Humidity 4	1	Unsigned	0	100	-	%	Humidity measured by EYE Sensor 4	TFT100 TMT250 GH5200	Permanent I/O elements
10808	EYE Magnet 1	1	Unsigned	0	1	-	-	Magnet measured by EYE Sensor by EYE Sensor 1	TFT100 TMT250 GH5200	Permanent I/O elements
10809	EYE Magnet 2	1	Unsigned	0	1	-	-	Magnet measured by EYE Sensor by EYE Sensor 2	TFT100 TMT250 GH5200	Permanent I/O elements
10810	EYE Magnet 3	1	Unsigned	0	1	-	-	Magnet measured by EYE Sensor by EYE Sensor 3	TFT100 TMT250 GH5200	Permanent I/O elements
10811	EYE Magnet 4	1	Unsigned	0	1	-	-	Magnet measured by EYE Sensor by EYE Sensor 4	TFT100 TMT250 GH5200	Permanent I/O elements
10812	EYE Movement 1	2	Unsigned	0	1	-	-	Movement state measure by EYE Sensor 1	TFT100 TMT250 GH5200	Permanent I/O elements
10813	EYE Movement 2	2	Unsigned	0	1	-	-	Movement state measure by EYE Sensor 2	TFT100 TMT250 GH5200	Permanent I/O elements
10814	EYE Movement 3	2	Unsigned	0	1	-	-	Movement state measure by EYE Sensor 3	TFT100 TMT250 GH5200	Permanent I/O elements
10815	EYE Movement 4	2	Unsigned	0	1	-	-	Movement state measure by EYE Sensor 4	TFT100 TMT250 GH5200	Permanent I/O elements
10816	EYE Pitch 1	1	Signed	-90	90	-	-	Pitch angle measured by EYE Sensor 1	TFT100 TMT250 GH5200	Permanent I/O elements
10817	EYE Pitch 2	1	Signed	-90	90	-	-	Pitch angle measured by EYE Sensor 2	TFT100 TMT250 GH5200	Permanent I/O elements
10818	EYE Pitch 3	1	Signed	-90	90	-	-	Pitch angle measured by EYE Sensor 3	TFT100 TMT250 GH5200	Permanent I/O elements
10819	EYE Pitch 4	1	Signed	-90	90	-	-	Pitch angle measured by EYE Sensor 4	TFT100 TMT250 GH5200	Permanent I/O elements
10820	EYE Low Battery 1	1	Unsigned	0	1	-	-	Low Battery indication for EYE Sensor 1	TFT100 TMT250 GH5200	Permanent I/O elements
10821	EYE Low Battery 2	1	Unsigned	0	1	-	-	Low Battery indication for EYE Sensor 2	TFT100 TMT250 GH5200	Permanent I/O elements
10822	EYE Low Battery 3	1	Unsigned	0	1	-	-	Low Battery indication for EYE Sensor 3	TFT100 TMT250 GH5200	Permanent I/O elements
10823	EYE Low Battery 4	1	Unsigned	0	1	-	-	Low Battery indication for EYE Sensor 4	TFT100 TMT250 GH5200	Permanent I/O elements
10824	EYE Battery Voltage 1	1	Unsigned	0	65535	-	-	Battery Voltage of EYE Sensor 1	TFT100 TMT250 GH5200	Permanent I/O elements
10825	EYE Battery Voltage 2	1	Unsigned	0	65535	-	-	Battery Voltage of EYE Sensor 2	TFT100 TMT250 GH5200	Permanent I/O elements
10826	EYE Battery Voltage 3	1	Unsigned	0	65535	-	-	Battery Voltage of EYE Sensor 3	TFT100 TMT250 GH5200	Permanent I/O elements
10827	EYE Battery Voltage 4	1	Unsigned	0	65535	-	-	Battery Voltage of EYE Sensor 4	TFT100 TMT250 GH5200	Permanent I/O elements
10832	EYE Roll 1	2	Signed	-180	180	-	-	Roll angle measured by EYE Sensor 1	TFT100 TMT250 GH5200	Permanent I/O elements
10833	EYE Roll 2	2	Signed	-180	180	-	-	Roll angle measured by EYE Sensor 2	TFT100 TMT250 GH5200	Permanent I/O elements
10834	EYE Roll 3	2	Signed	-180	180	-	-	Roll angle measured by EYE Sensor 3	TFT100 TMT250 GH5200	Permanent I/O elements
10835	EYE Roll 4	2	Signed	-180	180	-	-	Roll angle measured by EYE Sensor 4	TFT100 TMT250 GH5200	Permanent I/O elements
10836	EYE Movement count 1	2	Unsigned	0	65535	-	-	Movement count measure by EYE Sensor 1	TFT100 TMT250 GH5200	Permanent I/O elements
10837	EYE Movement count 2	2	Unsigned	0	65535	-	-	Movement count measure by EYE Sensor 2	TFT100 TMT250 GH5200	Permanent I/O elements

10838	EYE Movement count 3	2	Unsigned	0	65535	-	-	Movement count measure by EYE Sensor 3	TFT100 TMT250 GH5200	Permanent I/O elements
10839	EYE Movement count 4	2	Unsigned	0	65535	-	-	Movement count measure by EYE Sensor 4	TFT100 TMT250 GH5200	Permanent I/O elements
10840	EYE Magnet count 1	2	Unsigned	0	65535	-	-	Magnet trigger count measure by EYE Sensor 1	TFT100 TMT250 GH5200	Permanent I/O elements
10841	EYE Magnet count 2	2	Unsigned	0	65535	-	-	Magnet trigger count measure by EYE Sensor 2	TFT100 TMT250 GH5200	Permanent I/O elements
10842	EYE Magnet count 3	2	Unsigned	0	65535	-	-	Magnet trigger count measure by EYE Sensor 3	TFT100 TMT250 GH5200	Permanent I/O elements
10843	EYE Magnet count 4	2	Unsigned	0	65535	-	-	Magnet trigger count measure by EYE Sensor 4	TFT100 TMT250 GH5200	Permanent I/O elements
11317	EYE Sensor List	variable length	HEX	0 bytes	1024 bytes	-	-	EYE Sensor List	TFT100 TMT250 GH5200	Permanent I/O elements

Eventual I/O elements

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
155	Geofence zone 01	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
156	Geofence zone 02	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
157	Geofence zone 03	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
158	Geofence zone 04	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
159	Geofence zone 05	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
61	Geofence zone 06	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
62	Geofence zone 07	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
63	Geofence zone 08	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
64	Geofence zone 09	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
65	Geofence zone 10	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
70	Geofence zone 11	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
88	Geofence zone 12	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
91	Geofence zone 13	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
92	Geofence zone 14	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
93	Geofence zone 15	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
94	Geofence zone 16	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
95	Geofence zone 17	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
96	Geofence zone 18	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
97	Geofence zone 19	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
98	Geofence zone 20	1	Unsigned	0	3	-	-	0 - target left zone 1 - target entered zone 2 - over speeding end 3 - over speeding start	TMT250 GH5200 TFT100 TST100	Eventual I/O elements

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250	Trip	1	Unsigned	0	1	-	-	0 - trip stop 1 - trip start	TMT250 GH5200 TFT100 TST100 TMT250 GH5200 TFT100 TST100	Eventual I/O elements
255	Overspeeding Event	1	Unsigned	0	255	-	km/h	At over speeding start km/h, at over speeding end km/h	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
251	Idling	1	Unsigned	0	1	-	-	0 - moving 1 - idling	TFT100	Eventual I/O elements
252	Unplug	1	Unsigned	0	1	-	-	0 - battery present 1 - battery unplug	TST100	Eventual I/O elements
253	Green driving type	1	Unsigned	1	3	-	-	1 - harsh acceleration 2 - harsh braking 3 - harsh cornering	TFT100	Eventual I/O elements
246	Towing	1	Unsigned	0	1	-	-	0 - steady 1 - towing	TFT100	Eventual I/O elements
247	Crash detection	1	Unsigned	1	5	-	-	1 - crash 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) 6 - crash detected (device not calibrated)	TFT100	Eventual I/O elements
257	Crash trace data	Variable	HEX	0	1200	-	-	Crash trace data	TFT100	Eventual I/O elements
248	Immobilizer	1	Unsigned	0	2	-	-	0 - iButton not connected 1 - iButton connected (Immobilizer) 2 - iButton connected (Authorized Driving)	TFT100	Eventual I/O elements
254	Green Driving Value	1	Unsigned	0	1	0.01	G/grad	Depending on green driving type: if harsh acceleration or braking - g*100 (value 123 -> 1.23g), if harsh cornering - degrees (value in radians)	TFT100	Eventual I/O elements
249	Jamming	1	Unsigned	0	1	-	-	0 - jamming stop 1 - jamming start	TFT100 TST100	Eventual I/O elements
243	Green driving event duration	2	Unsigned	0	65535	-	ms	Duration of event that did generate Green driving	TFT100	Eventual I/O elements
236	Alarm	1	Unsigned	0	1	-	-	0 - Reserved 1 - Alarm event occurred	TMT250 GH5200	Eventual I/O elements
242	ManDown/FallDown	1	Unsigned	0	1	-	-	0 - ManDown/FallDown deactivated 1 - ManDown/FallDown is active	TMT250 GH5200 TST100 TFT100	Eventual I/O elements
310	Movement Event	1	Unsigned	0	1	-	-	0 - Movement event occurred 1 - No Movement event occurred	TMT250 GH5200	Eventual I/O elements
389	Button Click	HEX	Unsigned	0x11	0x53	-	-	Button ID (X) and Action (Y) Value 0xXY X - button ID: 1 - alarm button 2 - power button 3 - button 1 4 - button 2 5 - button 3 Y - action: 1 - 1 click 2 - 2 clicks 3 - long click	TMT250 GH5200	Eventual I/O elements
390	Power Event	1	Unsigned	0	1	-	-	1 - Device turned OFF 0 - Device turned ON	TMT250 GH5200	Eventual I/O elements
520	Tamper detection Event	1	Unsigned	0	1	-	-	0 - Tamper restore 1 - Tamper alarm	TMT250	Eventual I/O elements
386	Last Known Position	2	Unsigned	0	65535	-	s	Time in seconds has passed since last GNSS fix	TMT250 GH5200 TFT100 TST100	Eventual I/O elements
400	Amber Alert state	1	Unsigned	0	4	-	-	0 - Turned Off 1 - Turned On, count down timer started 2 - Amber Alert On button pressed to restart active timer 3 - Alarm 4 - Amber Alert turned On when timer is set to 0 seconds	GH5200	Eventual I/O elements
401	Amber Alert timer value	2	Unsigned	0	65535	-	s	Sends Amber Alert time-out configured value	GH5200	Eventual I/O elements
403	Heart Rate Alert	1	Unsigned	0	255	-	BPM	Sends heart rate (BPM) from Xiaomi Mi Band 2	GH5200	Eventual I/O elements
236	Alarm	1	Unsigned	0	1	-	-	0 - Reserved 1 - Alarm event occurred	TAT100 TAT140 TAT141	Eventual I/O elements
20012	Recovery mode alarm	1	Unsigned	0	2	-	-	0 - Reserved 1 - Reserved 2 - Recovery alarm event occurred	TAT100 TAT140 TAT141	Eventual I/O elements
20019	Tamper record event	2	Unsigned	0	3	-	-	0 - Holder is removed 1 - Central is attached 2 - Attached to metal surface 3 - Removed from metal surface	TAT240	Eventual I/O elements
20014	BLE Lost Beacon	1	Unsigned	0	3	-	-	0 - Reserved 1 - Reserved 2 - Reserved 3 - BLE Lost Beacon	TAT100 TAT140 TAT141 TAT240	Eventual I/O elements
463	BLE1 EYE sensor lost alarm	2	HEX	-	-	-	-	BEEF - BLE1 EYE sensor lost alarm	TAT100 TAT140 TAT141 TAT240	Eventual I/O elements
467	BLE2 EYE sensor lost alarm	2	HEX	-	-	-	-	BEEF - BLE2 EYE sensor lost alarm	TAT100 TAT140 TAT141 TAT240	Eventual I/O elements
471	BLE3 EYE sensor lost alarm	2	HEX	-	-	-	-	BEEF - BLE3 EYE sensor lost alarm	TAT100 TAT140 TAT141 TAT240	Eventual I/O elements
475	BLE4 EYE sensor lost alarm	2	HEX	-	-	-	-	BEEF - BLE4 EYE sensor lost alarm	TAT100 TAT140 TAT141 TAT240	Eventual I/O elements

E-Scooter elements

Property ID in AXL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Suggested by scooter	Parameter Group
339	Serial number	14	ASCII	0		-	-	Scooter serial number	TAT140	ESMAX/NGS	E-Scooter elements
340	Master control FW version[]	2	Unsigned	0	65535	-	-	Scooter's PCB and FW versions. First 4 bits (MSB) describe PCB version and the next 12 bits - FW version. For example, 0x1101, it means PCB version is 1 and FW version V1.0.1.	TAT140	ESMAX/Fullstar	E-Scooter elements
341	Error	1	Unsigned	10	50	-	-	Scooter error code (from 10 to 50).	TAT140	ESMAX/NGS/Fullstar	E-Scooter elements
342	Alarm code	1	Unsigned	9	12	-	-	9 - alarm for being pushed in lock mode 12 - alarm for high speed energy during brake	TAT140	ESMAX/NGS	E-Scooter elements
344	Lock status	1	Unsigned	0	1	-	-	0 - Scooter is unlocked 1 - Scooter is locked	TAT140	ESMAX/NGS/Fullstar	E-Scooter elements
345	Buzzer alarm status	1	Unsigned	0	1	-	-	0 - Scooter's buzzer is not active 1 - Scooter's buzzer is active	TAT140	ESMAX/NGS	E-Scooter elements
346	External battery status	1	Unsigned	0	1	-	-	0 - Scooter don't have external battery connected 1 - Scooter has external battery connected	TAT140	ES	E-Scooter elements
347	Charging status	1	Unsigned	0	1	-	-	0 - not charging, 1 - charging	TAT140	ESMAX	E-Scooter elements
349	Current operation mode	1	Unsigned	0	2	-	-	0 - NORMAL, 1 - ECU, 2 - SPORT	TAT140	ESMAX	E-Scooter elements
350	Internal battery voltage	2	Unsigned	0	42000	-	mV	Scooter's internal battery voltage	TAT140	ESMAX/NGS	E-Scooter elements
351	External battery voltage	2	Unsigned	0	42000	-	mV	Scooter's external battery voltage	TAT140	ES	E-Scooter elements
352	Battery percentage	1	Unsigned	0	100	-	%	Battery percentage of the scooter	TAT140	ESMAX/NGS/Fullstar	E-Scooter elements
353	Actual remaining mileage	4	Unsigned	0	327670	-	m	Actual mileage with remaining battery power	TAT140	ESMAX/NGS	E-Scooter elements
354	Predicted remaining mileage	4	Unsigned	0	327670	-	m	Predicted mileage with remaining battery power	TAT140	ESMAX	E-Scooter elements
355	Speed	1	Unsigned	0	255	-	km/h	Current scooter's speed	TAT140	ESMAX/NGS/Fullstar	E-Scooter elements
356	Total mileage	4	Unsigned	0	2147483647	-	m	Scooter's total mileage	TAT140	ESMAX/NGS/Fullstar	E-Scooter elements
357	Single mileage	4	Unsigned	0	327670	-	m	Single trip mileage	TAT140	ESMAX/Fullstar	E-Scooter elements
358	Total operation time	4	Unsigned	0	2147483647	-	sec	Scooter's total operation time	TAT140	ESMAX/NGS	E-Scooter elements
359	Total riding time	4	Unsigned	0	2147483647	-	sec	Scooter's total riding time	TAT140	ESMAX/Fullstar	E-Scooter elements
360	Single operation time	2	Unsigned	0	327670	-	sec	Single operation time	TAT140	ESMAX/NGS	E-Scooter elements
361	Single riding time	2	Unsigned	0	327670	-	sec	Single riding time	TAT140	ESMAX/NGS/Fullstar	E-Scooter elements
362	Body temperature	2	Signed	-32767	32767	0.1	°C	Temperature inside scooter	TAT140	ESMAX/Fullstar	E-Scooter elements
363	Internal battery temperature 1	2	Signed	-32767	32767	0.1	°C	Internal battery temperature 1	TAT140	ESMAX/NGS	E-Scooter elements
364	Internal battery temperature 2	2	Signed	-32767	32767	0.1	°C	Internal battery temperature 2	TAT140	ESMAX/NGS	E-Scooter elements
365	External battery temperature 1	2	Signed	-32767	32767	0.1	°C	External battery temperature 1	TAT140	ES	E-Scooter elements
366	Supply voltage	2	Unsigned	0	32767	-	mV	Supply voltage of the control circuit (system driving voltage)	TAT140	ESMAX/NGS/Fullstar	E-Scooter elements
367	External battery temperature 2	2	Signed	-32767	32767	0.1	°C	External battery temperature 2	TAT140	ES	E-Scooter elements
368	Average speed	2	Unsigned	0	65535	-	km/h	Average speed	TAT140	ESMAX/NGS	E-Scooter elements

370	External battery FW version(1)	2	Unsigned	0	65535	-	-	Sensor's external battery FW version	TMT250	ES	E-Sensor elements
371	Internal battery FW version(1)	2	Unsigned	0	65535	-	-	Sensor's internal battery FW version	TMT100	ES/MAX/MGRS	E-Sensor elements
372	Instrument panel FW version(1)	2	Unsigned	0	65535	-	-	Sensor's instrument panel FW version	TMT100	ES/MAX	E-Sensor elements
374	Internal battery capacity	1	Unsigned	0	100	-	%	Current residual capacity percentage of internal battery	TMT100	ES/MAX	E-Sensor elements
382	Internal battery capacity	1	Unsigned	0	100	-	%	Current residual capacity percentage of internal battery	TMT100	ES	E-Sensor elements
375	Normal speed limit	1	Unsigned	5	30	-	km/h	Normal speed limit	TMT100	ES/MAX	E-Sensor elements
383	Run speed limit	1	Unsigned	5	30	-	km/h	Run speed limit	TMT100	ES/MAX	E-Sensor elements
384	Sport speed limit	1	Unsigned	5	30	-	km/h	Sport speed limit	TMT100	ES/MAX	E-Sensor elements
386	Battery lock status	1	Unsigned	0	1	-	-	Battery lock status	TMT100	MAX	E-Sensor elements
387	Cable lock status	1	Unsigned	0	2	-	-	Cable lock status	TMT100	MAX	E-Sensor elements
377	Cable lock FW version	2	Unsigned	0	65535	-	-	Cable lock FW version	TMT100	MAX	E-Sensor elements

BLE Sensor I/O elements

Property ID in AVL packet	Property Name	Bytes	Type	Value range		Multiplier	Units	Description	HW Support	Parameter Group
				Min	Max					
25	BLE Temperature #1	2	Signed	-400	12050	-	°C	Degrees (°C), -40 - +125;	TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141	Bluetooth Low Energy
26	BLE Temperature #2	2	Signed	-400	12050	-	°C	Degrees (°C), -40 - +125;	TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141	Bluetooth Low Energy
27	BLE Temperature #3	2	Signed	-400	12050	-	°C	Degrees (°C), -40 - +125;	TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141	Bluetooth Low Energy
28	BLE Temperature #4	2	Signed	-400	12050	-	°C	Degrees (°C), -40 - +125;	TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141	Bluetooth Low Energy

29	BLE Battery #1	1	Unsigned	0	100	-	%	Battery level of sensor #1	Bluetooth Low Energy
20	BLE Battery #2	1	Unsigned	0	100	-	%	Battery level of sensor #2	Bluetooth Low Energy
22	BLE Battery #3	1	Unsigned	0	100	-	%	Battery level of sensor #3	Bluetooth Low Energy
23	BLE Battery #4	1	Unsigned	0	100	-	%	Battery level of sensor #4	Bluetooth Low Energy
86	BLE Humidity #1	2	Unsigned	0	1000	-	%RH	Humidity	Bluetooth Low Energy

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