

TST100 AVL ID List

[Main Page](#) > [E-Mobility Trackers](#) > [TST100](#) > **TST100 AVL ID List**



Contents

- [1 Permanent I/O elements](#)
- [2 Eventual I/O elements](#)
- [3 E-Scooter elements](#)
- [4 BLE Sensor I/O elements](#)

To search for compatible products, [Expand all content](#)

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

[illegible]

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	ESMAXNGS	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/Firmware	E-Scooter elements
341	Error	1	Unsigned	10	50	-	-	Scooter error code (from 10 to 50).	TAT140	ESMAXNGS/Firmware	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	ESMAXNGS	E-Scooter elements
344	Lock status	1	Unsigned	0	1	-	-	0 - Scooter is unlocked 1 - Scooter is locked	TAT140	ESMAXNGS/Firmware	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	ESMAXNGS	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	ESMAXNGS	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	ESMAXNGS/Firmware	E-Scooter elements
353	Actual remaining mileage	4	Unsigned	0	327670	-	m	Actual mileage with remaining battery power	TAT140	ESMAXNGS	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	ESMAXNGS/Firmware	E-Scooter elements
356	Total mileage	4	Unsigned	0	2147483647	-	m	Scooter's total mileage	TAT140	ESMAXNGS/Firmware	E-Scooter elements
357	Single mileage	4	Unsigned	0	327670	-	m	Single trip mileage	TAT140	ESMAX/Firmware	E-Scooter elements
358	Total operation time	4	Unsigned	0	2147483647	-	sec	Scooter's total operation time	TAT140	ESMAXNGS	E-Scooter elements
359	Total riding time	4	Unsigned	0	2147483647	-	sec	Scooter's total riding time	TAT140	ESMAX/Firmware	E-Scooter elements
360	Single operation time	2	Unsigned	0	327670	-	sec	Single operation time	TAT140	ESMAXNGS	E-Scooter elements
361	Single riding time	2	Unsigned	0	327670	-	sec	Single riding time	TAT140	ESMAXNGS/Firmware	E-Scooter elements
362	Body temperature	2	Signed	-32767	32767	0.1	°C	Temperature inside scooter	TAT140	ESMAX/Firmware	E-Scooter elements
363	Internal battery temperature 1	2	Signed	-32767	32767	0.1	°C	Internal battery temperature 1	TAT140	ESMAXNGS	E-Scooter elements
364	Internal battery temperature 2	2	Signed	-32767	32767	0.1	°C	Internal battery temperature 2	TAT140	ESMAXNGS	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	ESMAXNGS/Firmware	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	ESMAXNGS	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	ESMAX(MORE)	E-Sensor elements
372	Instrument panel FW version(1)	2	Unsigned	0	65535	-	-	Sensor's instrument panel FW version	TMT100	ESMAX	E-Sensor elements
374	Internal battery capacity	1	Unsigned	0	100	-	%	Current residual capacity percentage of internal battery	TMT100	ESMAX	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	ESMAX	E-Sensor elements
383	Run speed limit	1	Unsigned	5	30	-	km/h	Run speed limit	TMT100	ESMAX	E-Sensor elements
384	Sport speed limit	1	Unsigned	5	30	-	km/h	Sport speed limit	TMT100	ESMAX	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 Min Max	Multi plier	Units	Description	HW Suppo rt	Parameter Group
								TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141 TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141 TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141 TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141 TMT250 GH5200 TFT100 TST100 TAT100 TAT140 TAT141	
25	BLE Temperature #1	2	Signed	-400 12050	-	°C	Degrees (°C), -40 - +125;		Bluetooth Low Energy
26	BLE Temperature #2	2	Signed	-400 12050	-	°C	Degrees (°C), -40 - +125;		Bluetooth Low Energy
27	BLE Temperature #3	2	Signed	-400 12050	-	°C	Degrees (°C), -40 - +125;		Bluetooth Low Energy
28	BLE Temperature #4	2	Signed	-400 12050	-	°C	Degrees (°C), -40 - +125;		Bluetooth Low Energy

[illegible]

[illegible]