

Template:FMA2 Device Family Parameter list



Contents

- [1 System parameters](#)
- [2 Records parameters](#)
- [3 GSM parameters](#)
- [4 Data Acquisition Modes parameters](#)
 - [4.1 Home Network GSM operator code "Vehicle on STOP" parameters](#)
 - [4.2 Home Network GSM operator code "Vehicle on MOVING" parameters](#)
 - [4.3 Roaming Network GSM operator code "Vehicle on STOP" parameters](#)
 - [4.4 Roaming Network GSM operator code "Vehicle on MOVING" parameters](#)
 - [4.5 Unknown Network GSM operator code "Vehicle on STOP" parameters](#)
 - [4.6 Unknown Network GSM operator code "Vehicle on MOVING" parameters](#)
- [5 Features parameters](#)
 - [5.1 Green driving parameters](#)
 - [5.2 Overspeeding scenario parameters](#)
 - [5.3 Jamming scenario parameters](#)
 - [5.4 Immobilizer scenario parameters](#)
 - [5.5 iButton read notification](#)
 - [5.6 Trip scenario parameters](#)
- [6 AutoGeofencing scenario parameters](#)
- [7 iButton list](#)
- [8 Manual Geofence](#)
 - [8.1 Parameters](#)
- [9 I/O parameters](#)

System parameters

Parameter ID	Parameter Type	Recomended value	Value range		Value	Parameter name
			Min	Max		
1002	UInt8	-	0	2	0 - Ignition 1 - Movement sensor 2 - GPS	Stop Detection Source
1003	UInt8	1	0	1	0 - Disable 1 - Enable	Static navigation
1004	UInt8	-	0	2	0 - Power voltage 1 - Digital input 1 1 - Movement	Ignition source
1005	UInt16	-	0	30000	Voltage	Power Voltage High Level
1006	UInt16	-	0	30000	Voltage	Power Voltage Low Level
1920	UInt8	-	0	1	0 - Manual 1 - Auto	Ignition detection (Power voltage)

1921	UInt8	10	0	65536	Seconds	Ignition detection timeout
201	UInt8	1	0	2	0 - after position fix 1 - always	Records Saving/Sending
202	UInt8	0	0	2	2 - after time sync 0 - GNSS (all available) 1 - GPS only 2 - GLONASS only	GNSS System
1007	UInt32	-	1	259200	Seconds	GNSS Fix Timeout
Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1000	UInt8	-	0	2	0 - Disable 1 - Sleep 2 - Deep sleep	Sleep settings
200	UInt8	-	1	3000	Minutes	Timeout
Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1001	UInt8	-	0	1	0 - 0...10V 1 - 1...30V	Analog Input value range
Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1008	UInt8	1	0	1	0 - disabled 1 - enabled	NTP Time Synchronization

Records parameters

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1010	UInt8	-	0	1	0 - From oldest 1 - From Newest	Sorting
1011	UInt32	-	0	259200	Seconds	Active Data Link Timeout
1012	UInt8	-	0	300	Seconds	Server Response Timeout

⚠ ATTENTION! Some GSM operators may disconnect the device from an active data link if the device doesn't send any data for a very long time, even if active data link timeout is set to maximum value. The amount of time that an operator keeps the link open depends solely on the operator. For example, if active data link timeout is set to maximum, 259200 seconds (72 hours), and the device sends data to server every 86400 seconds (24 hours), the operator might disconnect the link earlier and the device will have to connect to the server anew. This may cost extra, depending on the operator GPRS data charge. It is strongly recommended, when using active data link timeout, that data sending to the server should not be very rare (24 hours or more). If data sending is more frequent, then the operator will not disconnect the device from the server.

GSM parameters

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1240	UInt8	-	0	1	0 - Disable 1 - Enable	GPRS content activation
1142	Char	-	0	32	String	APN name
1243	Char	-	0	30	String	APN username
1244	Char	-	0	30	String	APN password
Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		

1245	Char	-	0	31	String	Domain
1246	Uint16	-	0	65535	Number	Target Server Port
1247	Uint8	-	0	1	0 - TCP 1 - UDP	Protocol
1248	Uint8	-	0	1	0 - Not Allowed 1 - Allowed	Always online

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1252	Char	-	0	5	String	SMS Login
1253	Char	-	0	5	String	SMS password
1250	Char	-	0	1	0 - Not Allowed 1 - Allowed	SMS data sending settings
1273	Uint32	Example value: 7F,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF	-	-	Time is defined as 19 byte array. First byte of array defines week days; the rest 18 bytes define timestamps with 10 minute interval. In first byte, first bit (LSB) defines if module should connect to GPRS (send SMS) on Monday, second bit - on Tuesday and so on up to seventh bit - which means Sunday.	GPRS Week Time

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1260-1269	Char	-	1 digit	16 digits	String	Authorized phone numbers
150-159	Char	-	1 digit	16 digits	String	SMS Event PreDefined Numbers
1271 X	u32	X defines starting position that is changed: If X is from 0 to 49, X means index of operator code which has to be configured.	0 digit	7 digits	String	Operator list
1272 X	u32	X defines starting position that is changed: If X is from 0 to 49, X means index of operator code which has to be configured.	0 digit	7 digits	String	Operator Black list

Data Acquisition Modes parameters

Home Network GSM operator code "Vehicle on STOP" parameters

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1540	Uint32	-	0	2592000	Seconds	Min Period
1543	Uint8	1	1	225	Records	Min Saved Records
1544	Uint32	-	0	2592000	Seconds	Send period
1545	Uint32	Example value: 7F,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF	-	-	Time is defined as 19 byte array. First byte of array defines week days; the rest 18 bytes define timestamps with 10 minute interval. In first byte, first bit (LSB) defines if module should connect to GPRS (send SMS) on Monday, second bit - on Tuesday and so on up to seventh bit - which means Sunday.	GPRS Week Time

Home Network GSM operator code "Vehicle on MOVING" parameters

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1550	Uint32	-	0	2592000	Seconds	Min Period
1551	Uint32	-	0	65535	Meters	Min distance
1552	Uint16	0	1	160	Angle	Min angle
1553	Uint16	1	1	255	Records	Min Saved Records
1544	Uint32	-	0	2592000	Seconds	Send period
1555	Uint32	Example value: 7F,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF	-	-	Time is defined as 19 byte array. First byte of array defines week days; the rest 18 bytes define timestamps with 10 minute interval. In first byte, first bit (LSB) defines if module should connect to GPRS (send SMS) on Monday, second bit - on Tuesday and so on up to seventh bit - which means Sunday.	GPRS Week Time
1556	Uint16	-	0	255	km/h	Min Speed
1557	Uint8	-	0	1	0- GPS 1- LVCAN	Min Speed Source

Roaming Network GSM operator code "Vehicle on STOP" parameters

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1560	Uint32	-	0	2592000	Seconds	Min Period
1563	Uint8	1	1	225	Records	Min Saved Records
1564	Uint32	-	0	2592000	Seconds	Send period
1565	Uint32	Example value: 7F,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF	-	-	Time is defined as 19 byte array. First byte of array defines week days; the rest 18 bytes define timestamps with 10 minute interval. In first byte, first bit (LSB) defines if module should connect to GPRS (send SMS) on Monday, second bit - on Tuesday and so on up to seventh bit - which means Sunday.	GPRS Week Time

Roaming Network GSM operator code "Vehicle on MOVING" parameters

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1570	Uint32	-	0	2592000	Seconds	Min Period
1571	Uint32	-	0	65535	Meters	Min distance
1572	Uint16	0	1	160	Angle	Min angle
1573	Uint16	1	1	255	Records	Min Saved Records
1574	Uint32	-	0	2592000	Seconds	Send period
1575	Uint32	Example value: 7F,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF	-	-	Time is defined as 19 byte array. First byte of array defines week days; the rest 18 bytes define timestamps with 10 minute interval. In first byte, first bit (LSB) defines if module should connect to GPRS (send SMS) on Monday, second bit - on Tuesday and so on up to seventh bit - which means Sunday.	GPRS Week Time
1576	Uint16	-	0	255	km/h	Min Speed
1577	Uint8	-	0	1	0- GPS 1- LVCAN	Min Speed Source

Unknown Network GSM operator code "Vehicle on STOP" parameters

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1580	Uint32	-	0	2592000	Seconds	Min Period
1583	Uint8	1	1	225	Records	Min Saved Records
1584	Uint32	-	0	2592000	Seconds	Send period
1585	Uint32	Example value: 7F,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF	-	-	Time is defined as 19 byte array. First byte of array defines week days; the rest 18 bytes define timestamps with 10 minute interval. In first byte, first bit (LSB) defines if module should connect to GPRS (send SMS) on Monday, second bit - on Tuesday and so on up to seventh bit - which means Sunday.	GPRS Week Time

Unknown Network GSM operator code "Vehicle on MOVING" parameters

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1590	Uint32	-	0	2592000	Seconds	Min Period
1591	Uint32	-	0	65535	Meters	Min distance
1592	Uint16	0	1	160	Angle	Min angle
1593	Uint16	1	1	255	Records	Min Saved Records
1594	Uint32	-	0	2592000	Seconds	Send period
1595	Uint32	Example value: 7F,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF,FF	-	-	Time is defined as 19 byte array. First byte of array defines week days; the rest 18 bytes define timestamps with 10 minute interval. In first byte, first bit (LSB) defines if module should connect to GPRS (send SMS) on Monday, second bit - on Tuesday and so on up to seventh bit - which means Sunday.	GPRS Week Time
1596	Uint16	-	0	255	km/h	Min Speed
1597	Uint8	-	0	1	0- GPS 1- LVCAN	Min Speed Source

Features parameters

Green driving parameters

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1890	Uint8	-	0	1	0 - Disable 1 - Enable	Scenario settings
1891	Uint8	-	0	2	0 - disable 1 - DOUT1 2 - DOUT2	Digital Output Control
1909	Uint8	-	0	1	0 - GPS 1 - Accelerometer	Source
1892	Float	0.25	0.25	0.85	mG	Max Acceleration Force
1893	Float	0.35	0.25	0.85	mG	Max Braking Force
1894	Float	0.2	0.1	1.0	mG	Max Cornering Force

Overspeeding scenario parameters

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1895	UInt8	0	0	1	0 - Disable 1 - Enable	Scenario settings
1896	UInt8	-	0	2	0 - None 1 - DOUT 1 2 - DOUT 2	Digital Output control
1897	UInt16	-	0	260	km/h	Max speed

Jamming scenario parameters

Parameter ID	Parameter Type	Recommended Value	Value range		Value	Parameter name
			Min	Max		
1898	UInt8	-	0	1	0 - Disable 1 - Enable	Scenario settings
1899	UInt8	-	0	2	0 - None 1 - DOUT1 2 - DOUT2	Digital Output control
1900	UInt8	-	0	2	0 - Low sensitivity (50 RSSI) 1 - Medium sensitivity (30 RSSI) 2 - High sensitivity (10 RSSI)	Jamming sensitivity
1901	UInt16	60	0	65535	Seconds	Jamming Timeout
1902	UInt16	0	0	65535	Seconds	Jamming Pulse Duration

Immobilizer scenario parameters

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1903	UInt8	-	0	1	0 - Disable 1 - Enable	Scenario settings
1904	UInt8	-	0	2	0 - Disable 1 - DOUT1 2 - DOUT2	Digital Output Control
1905	UInt8	-	0	1	0 - Disable 1 - Enable	iButton list checking
1906	UInt16	30	5	65353	Seconds	Ignition Off Timeout

iButton read notification

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1907	UInt8	-	0	1	0 - Disabled 1 - Enabled	iButton detect
1908	UInt8_t	0	0	1	0 - Disabled 1 - DOUT1 2 - DOUT2	Digital Output Control

Trip scenario parameters

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1280	UInt8	-	0	1	0 - Disable 1 - Enable	Scenario settings
1281	UInt8	-	0	255	km/h	Start speed
1282	UInt16	-	0	65535	Seconds	Ignition off timeout
1283	UInt8	-	0	1	0 - Not 1 - Continuous	Continuous distance counting
1284	UInt8	-	0	1	0 - Disable 1 - Enable	Remember iButton ID
1285	UInt8	-	0	-	Meters	Odometer Value

AutoGeofencing scenario parameters

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1101	UInt8	1	0	1	0 - Disable 1 - Enable	Scenario Settings
1102	UInt16	60	0	65535	0 - Disable	Activation Timeout
1100	UInt8	-	0	1	0 - Ignition 1 - Enable	Deactivation Source
1103	UInt8	1	0	1	0 - Low 1 - high	AutoGeofence event priority
1104	UInt8	2	0	3	0 - No Event 1 - On entering zone 2 - On both 3 - On both	AutoGeofence event generating
1105	UInt32	100	0	1000000	Meters	Radius

iButton list

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
3500-3999	UInt64	-	0	FFFFFFFF FFFFFFFF	0 - iButton ID	iButton list

Manual Geofence

Parameter ID	Parameter Type	Recommended value	Value range		Value	Parameter name
			Min	Max		
1020	UInt32	1000	0	1000000	Border value meters	Frame border
1030	UInt8	-	0	1	0 - Circle 1 - Rectangle	Shape type
1031	UInt8	-	0	2	0 - Low 1 - High 2 - Panic	Priority
1032	UInt8	-	0	3	0 - No event 1 - On entering zone 2 - On exiting zone 3 - On both	Generate event

1033	float	-	-180	180	Rectangle left down corner X coordinate Or X1 Coordinate circle middle point	Longitude X1
1034	float	-	-90	90	Rectangle left down corner Y1 coordinate Or Y1 Coordinate circle middle point	latitude Y1
1035	float	-	-180	180	Rectangle right upper corner X2 coordinate	longitude X2
1035	float	1000	0	1000000	X2 coordinate radius of circle	longitude X2
1036	float	-	-90	90	Rectangle right upper corner Y2 coordinate If circle ID 1036 is not used	latitude Y2

Similarly to a group defined in the upper table:

Zone number	Parameter							
	Shape	Priority	Generate event	X1	Y1	X2	Radius	Y2
1	1030	1031	1032	1033	1034	1035	1035	1036
2	1040	1041	1042	1043	1044	1045	1045	1046
3	1050	1051	1052	1053	1054	1055	1055	1056
4	1060	1061	1062	1063	1064	1065	1065	1066
5	1070	1071	1072	1073	1074	1075	1075	1076

Parameters

ID	Parameter name	Value type	Value description	Min Value	max Value
1300	I/O#1 property parameter	S8	0 - disable 1 - enable	0	1
1301	I/O#1 priority parameter	S8	0 - Low 1 - High 2 - Panic	0	2
1302	I/O#1 High level	S32	used to set thresholds for I/O properties to generate events.	-2147483647	2147483647
1303	I/O#1 Low level	S32	used to set thresholds for I/O properties to generate events.	-2147483647	2147483647
1304	I/O#1 logic operand	S8	0 - on range exit 1 - on range entrance 2 - both 3 - monitoring 4 - hysteresis 5 - on changes	0	5
1305	I/O#1 averaging length	S32	Parameter defines I/O property sample length to average	0	2592000

Similarly to a group defined in the upper table

I/O parameters

I/O Element Number	I/O element parameters
Digital Input 1	1300-1305
Digital Input 2	1310-1315
Digital Input 3	1320-1325
Analog Input 1	1330-1335
Digital Output 1	1340-1345
Digital Output 2	1350-1355
GNSS PDOP	1360-1365
GNSS HDOP	1370-1375
External Voltage	1380-1385
GNSS Power	1390-1395
Movement Sensor	1400-1405
Trip distance	1410-1415
GSM Operator	1420-1425
Speed (Km/h)	1430-1435
iButton ID	1440-1445
Mode	1450-1455
GSM Signal	1460-1465
Deep Sleep	1470-1475
Cell ID	1480-1485
Area Code	1490-1495
Dallas Temperature 1	1500-1505
Reserved	1510-1515
Reserved	1520-1525
Battery Voltage	1530-1535
Battery Charging Current	1110-1115
Ignition	1120-1125
Total Distance	1130-1135
Reserved IO1	1140-1145
Reserved IO2	1150-1155
RFID	1160-1165
LLS Fuel1	1720- 1725
LLS Temp1	1730- 1735
LLS Fuel2	1740- 1745
LLS Temp2	1750- 1755
LLS Fuel3	1760- 1765
LLS Temp3	1770- 1775
LLS Fuel4	1780- 1785
LLS Temp4	1790- 1795
LLS Fuel5	1800- 1805
LLS Temp5	1810- 1815

Dallas Temperature 2	1820- 1825
Dallas Temperature 3	1830- 1835
Dallas Temperature 4	1840- 1845
Dallas Temperature ID 1	1850- 1855
Dallas Temperature ID 2	1860- 1865
Dallas Temperature ID 3	1870- 1875
Dallas Temperature ID 4	1880- 1885