FM6300 Device Family Parameter list

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System parameters

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	

Sleep Mode	x000	0	3	0	-	U8
0	Disable					
1	Enable					
2	Deep sleep					
3	Online deep sleep					
Sleep Timeout	x001	0	9000	1	-	U16
Ignition source	x900	0	5	0	-	U8
0	Power voltage					
1	DIN 1					
2	DIN 2					
3	DIN 3					
4	DIN 4					
5	Movement					
High Voltage Level(for Ignition)	x901	0	30000	0	-	U16
Low Voltage Level (for Ignition)	x902	0	30000	0	-	U16

GPRS data sending settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	
Server 1						
GPRS Context Activation	x240	0 (Disable)	1 (Enable)	0	-	S8
Protocol		0 (TCP)	1 (UDP)	0	-	U8
Server Response Timeout		5	300	5	-	U16
Domain		Empty	56 char	Empty	-	-
Target Server Port		0	65535	0	-	U16
Configuring format:		<Enable>,<IP>,<port>,<protocol>,<Server Reponse Tmo>				
Server 2						
GPRS Context Activation	x242	0 (Disable)	1 (Enable)	0	-	S8
Protocol		0 (TCP)	1 (UDP)	0	-	U8
Domain		Empty	56 char	Empty	-	-
Target Server Port		0	65535	0	-	U16
Configuring format:		<Enable>,<IP>,<port>,<protocol>				

GPRS data limit settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	
Enable GPRS limits	x241	0 (Disable)	1 (Enable)	0	-	U8
Data limit Home		1	10000	100	-	U16
Data limit Roaming		1	10000	10	-	U16
Configuring format:		<Enable>,,				

SMS security settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	
SMS Login	x252	Empty	5 char	Empty	-	S8[5]
SMS Password	x253	Empty	5 char	Empty	-	S8[5]
Authorized phone numbers	x260-x269	Empty	16 char	Empty	-	S8[17]

SMS data sending settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	
SMS Data	x250	0 (Disable)	1 (Enable)	0	-	U8
SMS Data send week time schedule	x273	Binary decoding	Binary decoding	-	-	20 byte array
Configuring format:		<x1><x2><x3><x4>.....<x19>				

Operator list settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	
Preferred Operator	x271	0	99999999	0	-	U32
Black List Operator	x272	0	99999999	0	-	U32
Configuring format: (setparam Y271 X)	X is start position. If no X is set starts from 0 Max 19 operator codes can be set (separated by comma) in one SMS command.					
Reading format: (getparam Y271 X)	X values can be 1,2,3. If X = 1, Operator codes from 0-19 are read from configuration and sent via SMS. If X = 2, Operator codes from 20-39 are read from configuration and sent via SMS. If X = 3, Operator codes from 40-49 are read from configuration and sent via SMS. If X = any other, Operator codes from 0-19 are read from configuration and sent via SMS *User must use X, without X value device responds that parameter is wrong or it can respond with wrong operator codes.					

Data Acquisition settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	
Data acquisition modes	x010					
Min Period (in seconds)		0	9999999	600	-	U32
Min Distance (in meters)		0	65535	0	-	U32
Min Angle (in degrees)		0	180	0	-	U16
Min Speed (in km/h)		0	400	0	-	U16
Min Speed Source		0/1/2/3/4 (0-GPS, 1-LVCAN, 2-ALLCAN, 3-FMS, 4-KLINE)		0	-	U8
Min Saved Records		1	25	10	-	U8
Min Send Period (in seconds)		0	9999999	600	-	U32
Configuring format:	<minperiod>,<mindistance>,<minangle>,<minspeed>,<minspeedsource>,<minsavedrec>,<sendperiod>					

Geofencing settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	

Frame Border (in meters)		x020	0	9999999	1	1000	U32
Geofence Overspeed control		x021	0	5	0	-	U8
Geofence Zone #1		x030					
Zone #1 Shape			0 (Circle)	1 (Rectangle)	0	-	U32
Zone #1 priority			0	7 (exl. 3)	0	-	U8
0	Low						
1	High						
2	Panic						
4	SW21						
5	SW22						
6	SW23						
7	SW24						
Zone #1 Generate Event			0	3	0	-	U8
0	No Event						
1	On enter						
2	On exit						
3	On both						
Min Angle (in degrees)			0	180	0	-	U16
Zone #1 Longitude X1 (Rectangle) / X (Circle)			-180	180	0	-	Float
			-180	180	0	-	Float
Zone #1 Latitude Y1 (Rectangle) / Y (Circle)			-90	90	0	-	Float
			-90	90	0	-	Float
Zone #1 Longitude X2 (Rectangle) / R (Circle)			-180	180	0	-	Float
			0	180 / 9999999.99	0	0	Float
Zone #1 Latitude Y2 (Rectangle) / None (Circle)			-90	90	0	-	Float
			-	-	-	-	-
Configuring format:			<shape>,<priority>,<generateEvent>,<fx1>,<fy1>,<fx2>,<fy2>				
Geofence Zone #2		x031	Same configuration as Geofence Zone #1				
Geofence Zone #3		x032					
Geofence Zone #4		x033					
Geofence Zone #5		x034					
Geofence Zone #6		x035					
Geofence Zone #7		x036					
Geofence Zone #8		x037					
Geofence Zone #9		x038					
Geofence Zone #10		x039					
Geofence Zone #11		x040					
Geofence Zone #12		x041					
Geofence Zone #13		x042					
Geofence Zone #14		x043					
Geofence Zone #15		x044					
Geofence Zone #16		x045					
Geofence Zone #17		x046					
Geofence Zone #18		x047					
Geofence Zone #19		x048					
Geofence Zone #20		x049					

Auto Geofencing settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	

	Autogeofence	x290				
	Deactivate By	0 (Ignition)	1 (iButton)	0	-	U8
	Activation Timeout (in seconds)	0	65535	60	60	U16
	Min Angle (in degrees)	0	180	0	-	U16
	Zone #1 priority	0	7	1	1	U8
0	Low					
1	High					
2	Panic					
4	SW21					
5	SW22					
6	SW23					
7	SW24					
	Zone #1 Generate Event	0	3	0	2	U8
0	No Event					
1	On enter					
2	On exit					
3	On both					
	Radius (in meters)	0	9999999	100	100	U32
	Configuring format:	<deactivateBy>,<tmo>,<priority>,<eventGenerating>,<radius>				

Towing Detection settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	
Towing Detection	X917	0 (Disable)	2 (High priority)	0	-	U8
Activation Tmo (min)		0	1440	5	-	-
Ignition Check (sec)		0	60	5	-	-
Duration (ms)		100	5000	1000	1000	-
Acceleration		0.15	5	0.25	0.25 m/s^2	-
Angle (deg.)		0.5	5	1.0	1.0	U8
Make Call Number		0	9	-	-	-
Configuring Format	<priority>,<activationTmo>,<TowingEvtTmo>,<Duration>,<Acceleration>,<TowingAngle>,<TowingCallNr>					

iButton List

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	
Authorized iButtons	500-999	0	FFFFFFFF FFFFFFFF	0	-	U64

Eco/Green driving settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	

Eco driving type		x910	0	5	0	-	U8
0	Disable						
1	No DOUT control						
2	DOUT1 control						
3	DOUT2 control						
4	DOUT3 control						
5	DOUT4 control						
Eco source			0 (accelerometer)	1 (GPS)	0	-	U8
Max Acceleration Force			5	100	22	25	Float
Max Braking Force			5	100	25	35	Float
Max Cornering Force			5	100	21	-	Float
Acceleration Active Output Duration			0	100	1	-	Float
Breaking Active Output Duration			0	100	1	-	Float
Cornering Active Output Duration			0	100	1	-	Float
Configuring format:			<Eco driving type>,<Ecosource><MaxAcceleration>,<MaxBraking>,<MaxCornering>,<AccOutputDuration>,<BrakingOutputDuration>,<CorneringOutputDuration>				

Overspeeding settings

Parameter		ID	Parameter value				Value type
			MIN	MAX	Default	Recommended	
Overspeeding mode		x911	0	5	0	-	U8
0	Disable						
1	No DOUT control						
2	DOUT1 control						
3	DOUT2 control						
4	DOUT3 control						
5	DOUT4 control						
Max Allowed Speed			0	300	90	-	U16
Configuring format:			<Overspeeding mode>,<MaxSpeed>				

Immobilizer settings

Parameter		ID	Parameter value				Value type
			MIN	MAX	Default	Recommended	
Immobilizer mode		x912	0	5	0	-	U8
0	Disable						
1	No DOUT control						
2	DOUT1 control						
3	DOUT2 control						
4	DOUT3 control						
5	DOUT4 control						
iButton List checking			0 (Disable)	1 (Enable)	0	-	U8
Ignition Timeout			1	255	30	-	U16
Configuring format:			<ImmobMode>,<button_enable>,<TMO>				

Excessive Idling settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	

Excessive Idling	x913	0 (Disable)	1 (Enable)	0	-	U8
Time to stationary		0	255	1	-	U16
Time to movement		0 (Disable)	255	1	-	U16
Configuring format:		<Enable>,,				

Jamming settings

Parameter		ID	Parameter value				Value type
			MIN	MAX	Default	Recommended	
Jamming Detection		x914	0	5	0	-	U8
0	Disable						
1	No DOUT control						
2	DOUT1 control						
3	DOUT2 control						
4	DOUT3 control						
5	DOUT4 control						
Sensitivity			1 (low)	3 (High)	0	-	U8
Timeout			1	255	60	-	-
DOUT duration			1	255	0	-	U16
Configuring format:		<Enable>,<Sensitivity>,<Start_TMO>,<DOUT_duration_TMO>					

iButton Notification settings

Parameter		ID	Parameter value				Value type
			MIN	MAX	Default	Recommended	
iButton notification		x915	0	5	0	-	U8
0	Disable						
1	No DOUT control						
2	DOUT1 control						
3	DOUT2 control						
4	DOUT3 control						
5	DOUT4 control						
Timeout			1	65530	0	-	U16
Configuring format:		<Enable/Dout control>,<DOUT TMO>					

Crash Detection settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	
Scenario	x918	0 (Disable)	1 (Enable)	0	-	U8
Acceleration Threshold		16	8000	4000	-	U8
Duration		0	600	10	-	U8
Configuring format:		<Scenario>,<Threshold>,< Duration>				

Trip settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	

Trip	x280	0 (Disable)	1 (Enable)	0	-	U8
Start Speed		0	255	5	-	U8
Ignition Off Timeout		0	65536	60	-	U16
Remember iButton ID, while Trip detected		0 (Disable)	1 (Enable)	0	-	U8
Trip Mode		0 (Between)	1 (Continous)	0	-	U8
Configuring format:	<Enable>,<StartStopSpeed>,<IgnitionOffTimeout>,<RememberiButton>,<Mode>					

Global and External devices parameters

Parameter	ID	Possible Parameter Value	Default Value
Profile Change On Event	100	0/1 (0 – disable, 1 – enable)	0
Prefered records saving destination	101	0/1 (0 – internal memory, 1 – SDcard)	10
Analog Input 1-2 Type	105	0/1 (0 – 10 V, 1 – 30 V)	0
Analog Input 3 Type	106	0/1 (0 – 10 V, 1 – 30 V)	0
Static Navigation On/Off	107	0/1 (0 – disable, 1 – enable)	1
Records Sorting	108	0/1 (0 – from newest, 1 – from oldest)	0
Active Data Link Timeout	109	0 – 259200 (time in seconds)	5
Accelerometer Filter Start Value	112	1 – 10 (time in seconds)	1
Accelerometer Filter Stop Value	113	1 – 255 (time in seconds)	30
Total Odometer source	114	0/1/2/3/4/5 (0 – GPS, 1 – GPS, 2 – LVCAN, 3 – ALLCAN, 4 – FMS, 5 – KLINE)	0
J1708 Enable parameter	115	0/1 (0 – disable, 1 – enable)	0
GNSS Satellite System	116	0/1/2/3/4 (0 – all available, 1 – GPS, 2 – GLONASS, 3 – GNSS (all available) + SBAS, 4 – GPS + SBAS)	0
NTP mode	129	0/1/2/3 (0 – disable, 1 – NTP + NITZ2, 2 – NTP Only, 3 – NITZ Only)	0
GNSS TMO For NTP	121	0-300	0
Garmin Ping filter	117	0/1 (0 – disable, 1 – enable)	0
Garmin Unicode filter	118	0/1 (0 – disable, 1 – enable)	1
COM1 baudrate	119	0 – 115200	
COM1 Mode	120	0-255 (5 - Silent,97 – LLS Mode,98 – LCD Mode, 99 – RFID Mode, 100 – RFID MF7 Mode, 101 – Garmin Mode, 161 – COM TCP Link Mode, 177 – COM TCP Link Mode Binary, 203 – DTO 1731, 204 –SE500, 10-11 – reserved)	
COM2 Baudrate	122	0 – 115200	115200
COM1 start byte	123	0 - 255	0
COM2 Mode	124	0 – 255 (5 - Silent, 13 - FM Log, 15 – NMEA, 97 - LLS, 98 - LCD, 99 - RFID, 100 - RFID M7, 101 - Garmin, 161 - COM TCP Link, 177 - COM TCP Link binary)	5
TCP Link mode buffering	125	0/1 (0 – disable, 1 – enable)	0
COM1 end byte	126	0 - 255	0
COM2 start byte	127	0 - 255	0
COM2 end byte	128	0 - 255	0
COM1 Timestamp	151	0/1 (0 – disable, 1 – enable)	0
COM1 CMD ID	152	0 – 255	6
COM2 Timestamp	153	0/1 (0 – disable, 1 – enable)	0
COM2 CMD ID	154	0 – 255	6

Network Ping Timeout	155	0 – 259200	1
Network Ping Mode	156	0 - disabled 1 - 0xFF 2 - Empty Codec 12	0
Records saving/Sending	157	0/1/2 (0 – After GNSS fix,1 – Always, 2 – After time synchronization)	0
SMS Event number	222-231	SMS Event number	„“
SMS Event ID	300-499	SMS Events	
Authorized iButtons	500-999	Authorized iButtons FFFFFFFF	-
RS485 Activate	232	0/1 (0 – disable, 1 – enable)	0
RS485 Baudrate	233	0 – 115200	115200
RS485 Mode	234	0 – 255 (5 – Silent, 13 – Log mode, 15 – NMEA, 97 – LLS Mode, 161 – TCP link mode, 171 – Binary mode)	5
LLS 1-5 adress	256-260	0,255	0
SIM1 GPRS APN	240	All character range	
SIM1 GPRS USER	241	All character range	
SIM1 GPRS PASS	242	All character range	
SIM2 GPRS APN	243	All character range	
SIM2 GPRS USER	244	All character range	
SIM2 GPRS PASS	245	All character range	
Tachograph ignition source	158	1/2/3/4	3
Tachograph device	159	0 - DTC0 1381, 1 - SE5000	0
Tacho web	160	0/1 (0 – disable, 1 – enable)	0
Tacho web domain	161	Maximum 56 Char	Empty
Tacho web port	162	0 - 65535	0
Tacho web start delay	174	0 – 255 (Min)	5
Bluetooth Power	164	0/1/2 (0-disable,1-enable hidden,2-enable visible)	0
Bluetooth Name	165	String	
Bluetooth DINx call trigger	170-173	0/1 (0 – disable, 1 – enable)	0
Bluetooth DINx call trigger number index	166-169	0 – 9 (numbers from predefinedfined list)	0

CAN parameters

Parameter name	ID	Minimum value	Maximum value	Recommended value	Value type
CAN 1 Enable parameter	146	0	2	1	U8
CAN 1 Baud Rate	147	0	1000	250	U32
CAN 1 operational mode	148	0	1	0	U8
CAN 2 Enable parameter (Used for tachograph)	149	0	2	1	U8
CAN 2 Baud Rate	150	250	500	250	U32
CAN 2 operational mode	163	0	1	0	U8

ManualCAN

CAN#0 I/O properties (ID=x406):
CAN#0 I/O parameter priority Parameter defines CAN I/O element priority. Enable or Disable.

Minimum value	Maximum value	Recommended value	Goes with (Depends on) parameters	Value type
0	2	0	CAN#0 I/O CAN Type ID CAN#0 I/O OutputDataMask CAN#0 I/O CAN ID	U8

CAN#0 I/O CAN Type ID

Parameter defines CAN element ID length. CAN element ID could be 11 or 29 bits length.
For 11 bits ID parameter value is 0, for 29 bits ID – 1.

Minimum value	Maximum value	Recommended value	Goes with (Depends on) parameters	Value type
0	1	1	CAN#0 I/O Priority CAN#0 I/O OutputDataMask CAN#0 I/O CAN ID	U8

CAN#0 Output data mask
Parameter defines CAN data mask. This parameter is 8 bit length and indicates which data bytes of CAN message are sent for calculation and which are ignored. Bit value 1 means that CAN data byte will be preceded and sent to server.

Example: 00110011 is 51 integers.

Minimum value	Maximum value	Recommended value	Goes with (Depends on) parameters	Value type
0	255	-	CAN#0 I/O Priority CAN#0 I/O CAN Type ID CAN#0 I/O CAN ID	U8

CAN#0 CAN ID
Parameter defines CAN identifier. ID can be 11 or 29 bits length.
Example: 18FEE925 (total fuel used)

Minimum value	Maximum value	Recommended value	Goes with (Depends on) parameters	Value type
0	FFFFFFFF	-	CAN#0 I/O Priority CAN#0 I/O CAN Type ID CAN#0 I/O OutputDataMask	U32

To configure CAN#0 I/O element every value above should be separated with comma. For example, SMS should look like:
“ setparam 1406 1,0,51,18FEE925” (“ setparam 1406 <priority>,<CANTypeID>,<outputDataMask>,<CANID>)

- 51 is output data mask converted from binary 00110011
- Above SMS example will configure first profile CAN#0 I/O element with CAN type ID 29 bits,

output data mask 51 (must be written after converting in decimal from binary),CAN ID FEE9 - total fuel used.
The rest CAN elements are configured in the same sequence. CAN elements and parameters ID’s are listed below.

Manual CAN1 Element Number	CAN1 Element parameters	Manual CAN 2 Element Number	CAN2 Element parameters
CAN#0	x406	CAN#0	x504
CAN#1	x407	CAN#1	x505
CAN#2	x408	CAN#2	x506

CAN#3	x409	CAN#3	x507
CAN#4	x410	CAN#4	x508
CAN#5	x411	CAN#5	x509
CAN#6	x412	CAN#6	x510
CAN#7	x413	CAN#7	x511
CAN#8	x414	CAN#8	x512
CAN#9	x415	CAN#9	x513

There are only 14 I/O parameters that could use Averaging Constant: Digital Inputs (1-4); Analog Inputs (1-4); Battery Voltage; Battery Current; External Voltage; PDOP; HDOP; Speedometer. I/O parameters: “Current Profile”, “Fuel level meter” (1-2), “Fuel temperature” (1-2), “GNSS Status”, “Network Type”, “Movement”, “Active GSM Operator”, “iButton ID”, “Odometer”, “GSM Signal”, “Deep Sleep”, “Cell ID”, “Area Code”, “PCB Temperature”, “Dallas temperature Sensor 0..2”, “Fuel Counter” and “RFID ID” cannot use Averaging constant functionality.

LVCAN

Parameter name	ID	Minimum value	Maximum value	Recommended value	Value type
LVCAN mode	903	0	2	0	U8
Send data with 0, if ignition is off	904	0	1	1	U8

LVCAN/ALL-CAN300 I/O elements

Parameter name	ID
[LVC Vehicle Speed]	x399
[LVC Acce Pedal Position]	x400
[LVC Fuel Consumed]	x401
[LVC Fuel Level Liters]	x402
[LVC Engine RPM]	x403
[LVC Total Mileage]	x404
[LVC Fuel Level Percent]	x405
[LVC Program Number]	x452
[LVC ModuleID]	x453
[LVC Engine Work Time]	x454
[LVC Engine Work Time (counted)]	x455
[LVC Total Mileage (counted)]	x456
[LVC Fuel Consumed (counted)]	x457
[LVC Fuel Rate]	x458
[LVC AdBlue Level (percent)]	x459
[LVC AdBlue Level (liters)]	x460
[LVC Engine Load]	x461
[LVC Engine Temperature]	x462
[LVC Axle 1 Load]	x463
[LVC Axle 2 Load]	x464
[LVC Axle 3 Load]	x465

[LVC Axle 4 Load]	x466
[LVC Axle 5 Load]	x467
[LVC Control State Flags]	x468
[LVC Agricultural Machinery Flags]	x469
[LVC Harvesting Time]	x470
[LVC Area of Harvest]	x471
[LVC Mowing Efficiency]	x472
[LVC Grain Mown Volume]	x473
[LVC Grain Moisture]	x474
[LVC Harvesting Drum RPM]	x475
[LVC Gap Under Harvesting Drum]	x476
[LVC Security State Flags]	x477
[LVC Tacho Total Vehicle Distance]	x478
[LVC Trip Distance]	x479
[LVC Tacho Vehicle Speed]	x480
[LVC Tacho Driver Card Presence]	x481
LVC Driver1 States]	x482
[LVC Driver2 States]	x483
[LVC Driver1 Continuous Driving Time]	x484
[LVC Driver2 Continuous Driving Time]	x485
[LVC Driver1 Cumulative Break Time]	x486
[LVC Driver2 Cumulative Break Time]	x487
[LVC Driver1 Duration Of Selected Activity]	x488
[LVC Driver2 Duration Of Selected Activity]	x489
[LVC Driver1 Cumulative Driving Time]	x490
[LVC Driver2 Cumulative Driving Time]	x491
[LVC Driver1 ID High]	x492
[LVC Driver1 ID Low]	x493
[LVC Driver2 ID High]	x494
[LVC Driver2 ID Low]	x495
[LVC Battery Temperature]	x496
[LVC Battery Level (percent)]	x497
[LVC Door Status]	x498
[DTC Errors]	x514
[CNG Status]	x515
[CNG Used]	x516
[CNG Level]	x517
[DTC Codes]	X518
Configuration Format	<priority>,<HighLevel>,<LowLevel>,<Operand>,<AvgConstant>
Example:	' setparam 3400 1,0,0,3,10' Acce Pedal Position is set on low priority in profile

AutoCAN

Category name	Element ID	Element name
Cruise Control/Vehicle Speed	346	Brake switch
	347	Wheel based speed
	348	Cruise control active
	349	Clutch switch
	350	PTO state
Electronic Engine Controller #2	351	Accelerator pedal position 1 X
	352	Engine Percent Load At Current Speed X
Fuel Consumption	353	Engine total fuel used
Dash Display	354	Fuel level 1 X
Electronic Engine Controller #1	355	Engine speed X
Vehicle Weight **	356-370	Axle location
		Tire location
		Axle weight
Engine Hours, Revolutions: HOURS	371	Engine total hours of Operation X
Vehicle Identification	372	Vehicle identification number X
FMS Standard interface	373	SW-version supported X
	374	Diagnostics supported X
	375	Requests supported X
High Resolution Vehicle Distance	376	High resolution total vehicle distance X
Service Information	377	Service distance
Tachograph	378	Vehicle motion X
	379	driver 2 working state X
	380	driver 1 working state X
	381	Vehicle overspeed
	382	Driver 1 time rel. states
	383	Driver 2 time rel. states
	384	Driver 1 card X
	385	Driver 2 card X
	386	Direction indicator
	387	Tachograph performance X
	388	Handling information X
	389	System event X
	390	Tachograph vehicle speed X
Engine Temperature 1	391	engine coolant temperature X
Ambient Conditions	392	Ambient Air Temperature X

Driver’s Identification	393	Driver 1 ID
Driver’s Identification	394	Driver 2 ID
Fuel Economy	395	Fuel rate
	396	Instantaneous Fuel Economy
PTO Drive Engagement	397	At least one PTO engaged
PTO Drive Engagement	397	At least one PTO engaged
High Resolution Fuel Consumption (Liquid)	398	High resolution engine total fuel used
Combined vehicle weight	503	The total weight of the truck and all attached trailers

K-Line parameters

Name	Parameter name	Configuration ID	Available Values
KLINE Driver Recognize	Priority	X050	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
KLINE Driver 1 working state	Priority	X051	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
KLINE Driver 2 working state	Priority	X052	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
KLINE Overspeed	Priority	X053	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
KLINE Driver 1 card	Priority	X054	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change

KLINE Driver 2 card	Priority	X055	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
KLINE Driver 1 rel time states	Priority	X056	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
KLINE Driver 2 rel time states	Priority	X057	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
KLINE Vehicle speed	Priority	X058	0 – disable 1 – low 2 – high
	High level		0 – 255 km/h
	Low level		0 – 255 km/h
	Generate event		0 – On range exit 1 – On range entrance 2 – On both 3 – Monitoring 4 – Hysteresis 5 – On change
KLINE Odometer	Priority	X059	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
KLINE Distance	Priority	X060	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
KLINE Tacho Timestamp	-	X061	-
KLINE Driver 1 ID	Priority	X062	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change

KLINE Driver 2 ID	Priority	X063	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
KLINE Vehicle Identification Number	Priority	X065	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
KLINE Vehicle Registration Number	Priority	X066	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
KLINE Card 1 issuing number state	Priority	X067	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
KLINE Card 2 issuing number state	Priority	X068	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
LVC Driver1 Continuous Driving Time	Priority	X600	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
LVC Driver2 Continuous Driving Time	Priority	X601	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
LVC Driver1 Cumulative Break Time	Priority	X602	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change

LVC Driver2 Cumulative Break Time	Priority	X603	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
LVC Driver1 Duration Of Selected Activity	Priority	X604	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
LVC Driver2 Duration Of Selected Activity	Priority	X605	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
LVC Driver1 Cumulative Driving Time	Priority	X606	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
LVC Driver2 Cumulative Driving Time	Priority	X607	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change
Data source	Priority	X608	0 – disable 1 – low 2 – high
	High level		N/A
	Low level		N/A
	Generate event		3 – Monitoring 5 – On change

Tachograph Priority Parameters

Tachograph Data front panel supported with Firmware version 01.00.xx All the data that can be read from FMS/Tachograph/K-line/LV-CAN|ALL-CAN is moved to one tab "Tachograph data" you can choose from what interface the data will be read by choosing the priority of an interface. For example if you have FMB6 connected to FMS and K-line and you wish to get data about "Driver 1 Card" from K-line set the K-line priority to 1 and FMS priority to 2 or disable this interface.

- 1 - highest priority 4 - lowest priority

Name	Parameter name	Configuration ID	Available Values
K-Line Periodic Timeout	MinPeriod in Seconds	X011	Min. 0 Max. 9999999
KLINE Priority	Priority	X012	0 – disable 1 - Priority 1 2 - Priority 2 3 - Priority 3 4 - Priority 4
All Can Priority	Priority	X013	0 – disable 1 - Priority 1 2 - Priority 2 3 - Priority 3 4 - Priority 4
Tacho Can Priority	Priority	X014	0 – disable 1 - Priority 1 2 - Priority 2 3 - Priority 3 4 - Priority 4
FMS Priority	Priority	X015	0 – disable 1 - Priority 1 2 - Priority 2 3 - Priority 3 4 - Priority 4

IO Properties

I/O properties are additional data sources, which are recorded along with usual GPS data.
IO#0 (ID=x300)
I/O#0 priority
Parameter defines I/O property type of priority: 0 is disabled, 1 is low, 2 – high, 3 – panic, 4 – SW21, 5 – SW22, 6 – SW23, 7 –SW24.

Minimum value	Maximum value	Recommended value	Goes with (Depends on) parameters	Value type
0	7 (ex.3)	0	I/O#0 property parameter I/O#0 High level I/O#0 Low level I/O#0 logic operand I/O#0 averaging constant	S8

I/O#0 High level

Parameter defines high value of triggered I/O property. This parameter is used to set thresholds for I/O properties to generate events.

Minimum value	Maximum value	Recommended value	Goes with (Depends on) parameters	Value type
0	9999999	1	I/O#0 property parameter - priority I/O#0 Low level I/O#0 logic operand I/O#0 averaging constant	S32

I/O#0 Low level

Parameter defines Low value of triggered I/O property. This parameter is used to set thresholds for I/O properties to generate events.

Minimum value	Maximum value	Recommended value	Goes with (Depends on) parameters	Value type
0	9999999	1	I/O#0 property parameter - priority I/O#0 High level I/O#0 logic operand I/O#0 averaging constant	S32

I/O#0 Logic operand

Parameter defines when event is sent: 0 is event on exit, 1 – on entrance, 2 – on both, 3 – monitoring, 4 – hysteresis, 5 – on change.

Minimum value	Maximum value	Recommended value	Goes with (Depends on) parameters	Value type
0	5	2	I/O#0 priority I/O#0 High level I/O#0 Low level I/O#0 averaging constant IO#0 (ID=x300)	S8

I/O#0 Averaging constant

Parameter defines I/O property sample length to average. If no averaging needed default value is 10.

Minimum value	Maximum value	Recommended value	Goes with (Depends on) parameters	Value type
1	99999999	1	IO#0 (ID=x300) I/O#0 priority I/O#0 High level I/O#0 Low level I/O#0 logic operand	S32

To configure I/O#0 element every value above should be separated with comma. For example, configuring first profile I/O#0 element by SMS, SMS should look like: “ setparam 3300 1,0,0,1,1” (“ setparam <profile number>300 <priority>,<HighLevel>,<LowLevel>,<Operand>,<AvgC onstant>”)

Other I/O property elements can be configured in the same logic. All I/O element parameters are listed below.

I/O Element Number	I/O element parameters	I/O Element Number	I/O element parameters

I/O#0 – Digital input 1	x300	I/O#31 – Dallas ID 2	x327
I/O#1 – Digital input 2	x301	I/O#32 – Dallas Temp. 2	x328
I/O#2 – Digital input 3	x302	I/O#33 – Dallas ID 3	x329
I/O#3 – Digital input 4	x303	I/O#34 – Dallas Temp. 3	x330
I/O#4 – Digital output 1	x304	I/O#35 – Dallas ID 4	x331
I/O#5 – Digital output 2	x305	I/O#36 – Dallas Temp. 4	x332
I/O#6 – Digital output 3	x306	I/O#37 – Dallas ID 5	x499
I/O#7 – Digital output 4	x307	I/O#38 – Dallas Temp. 5	x500
I/O#8 – Analog input 1	x308	I/O#39 – Dallas ID 6	x501
I/O#9 – Analog input 2	x309	I/O#40 – Dallas Temp. 6	x502
I/O#10 – Analog input 3	X445	I/O#41 – Fuel Counter	x333
I/O#11 – Profile	x310	I/O#42 – Ignition	x334
I/O#12 – Battery voltage	x311	I/O#43 – RFID COM1	x335
I/O#13 – Battery Current	x312	I/O#44 – Total Odometer	x519
I/O#14 – GPS PDOP	x313	I/O#45 – RFID COM2	x520
I/O#15 – GPS HDOP	x314	I/O#46 – Aixis X	X521
I/O#16 – Ext. Voltage	x315	I/O#47 – Aixis Y	X522
I/O#17 – GNSS Status	x316	I/O#48 – Aixis Z	X523
I/O#18 – Movement sensor	x317	I/O#49 – IMSI code	x524
I/O#19 – Trip Odometer	x318	I/O#50 – CCID code	x525
I/O#20 – GSM Operator	x319	I/O#51 – SD Status	X526
I/O#21 – Speed	x320	I/O#52 – LLS #1 Fuel	x336
I/O#22 – iButton ID	x321	I/O#53 – LLS #1 Temp.	x337
I/O#23 – GSM Signal level	x322	I/O#54 – LLS #2 Fuel	338
I/O#24 – Network Type	x447	I/O#55 – LLS #2 Temp.	x339
I/O#25 – Cell ID	x450	I/O#56 – LLS #3 Fuel	x340
I/O#26 – Area Code	x451	I/O#57 – LLS #3 Temp.	x341
I/O#27 – Deep Sleep	x323	I/O#58 – LLS #4 Fuel	x342
I/O#28 – PCB Temp.	x324	I/O#59 – LLS #4 Temp.	x343
I/O#29 – Dallas ID 1	x325	I/O#60 – LLS #5 Fuel	x344
I/O#30 – Dallas Temp. 1	x326	I/O#61 – LLS #5 Temp.	x345

Camera Settings

Parameter	ID	Parameter value				Value type
		MIN	MAX	Default	Recommended	

Camera Power DOUT	x064	1 (Enable)	4 (Teltonika cable)	0 (Disable)	-	U8
Timeout		0 (Disable)	1 (Enable)	0	-	U8
Timeout value		60	65535	3600 s.	-	U16
Digital Input 1 event		0 (Disable)	1 (Enable)	0	-	U8
Digital Input 2 event		0 (Disable)	1 (Enable)	0	-	U8
Digital Input 3 event		0 (Disable)	1 (Enable)	0	-	U8
Digital Input 4 event		0 (Disable)	1 (Enable)	0	-	U8
ECO/Green Driving Event		0 (Disable)	1 (Enable)	0	-	U8
Excessive Idling		0 (Disable)	1 (Enable)	0	-	U8
Overspeeding		0 (Disable)	1 (Enable)	0	-	U8
Send In Roaming		0 (Disable)	1 (Enable)	0	-	U8
Crash		0 (Disable)	1 (Enable)	0	-	U8
Towing		0 (Disable)	1 (Enable)	0	-	U8
Picture Burst		1	10	1	-	U8
Time between burst events		3	15	3	-	U8
Configuring format:	<PWR_SOURCE><BY DIN1>,<BY DIN2>,<BY DIN3>,<BY DIN4>,<BY ECO>,<BY TMO>,<TMO_VAL>,<BURST_VAL>,<BY IDLING>,<BY OVS>,<ROAMING_SEND>,<CRASH>,<TOWING>,<BURST_INT>					