



## **PRO3 / ECO3 / TCO3 SMS commands list**

**2013-11-29**

# SMS

There is a possibility to send SMS message to FM device. FM device answers with SMS message too. This is an easy way to quickly interact with FM device. SMS messages are used:

- to get specific information from FM device;
- to reconfigure some parameters of FM device;
- to influent FM device work.

SMS structure: "**(password) (command) (command text)**"

Password, command and command text are separated by space symbol.

Password – if there is no password, then you need to write just space symbol before the command.

Usually command text parameters are separated by 'comma (,) symbol.

## Commands

### Coords – current coordinates

SMS message is used to get current GPS status. Response has 8 parameters.

Parameter	Description
Time	Current GMT date & time.
lat.	Current latitude.
long.	Current longitude.
alt.	Current altitude (meters).
sat.	Currently visible satellites.
dir.	Current angle.
hdop	Current HDOP level.
state	Current GPS/GLONASS state: 1-off, 2-on no fix, 3-on got fix, 4-not responding, 5-sleep, 6-disabled.

Example: *pass coords*

Response example: *2013-04-24 07:01, lat. 46.1443183, long. 11.881766, alt. 217.5, sat. 8, dir. 198.10, hdop 100, state 3*

### Version – FM device version

SMS message is used to get current FM device version. Response has 5 parameters.

Parameter	Description
1	Bootloader version.
2	Firmware version.
3	Hardware version.
4	GSM signal level.
5	Voltage status: 0 – lower then 8 Volts (bad), 1- higher then 8 Volts (OK).

Example: *pass version*

Response example: *5402,00.02.15,1089,5,1*

## Gsminfo – GSM/GPRS information

SMS message is used to get GSM and GPRS information. Response has 15 parameters.

Parameter	Title	Description
<b>ST</b>	Start Time	Date & time (GMT) from the last FM device reset/power ON.
<b>GSM network</b>		
<b>OP</b>	Operator	GSM operator number
<b>lvl</b>	Level	GSM signal level.
<b>LAC</b>	Location Area Code	16 bit number thereby allowing 65536 location areas within one GSM PLMN.
<b>CID</b>	Cell ID	A GSM Cell ID (CID) is a generally unique number used to identify each Base Transceiver Station (BTS) or sector of a BTS
<b>FM device modem parameters (M)</b>		
<b>I</b>	Initialization	The number of times when FM device has tried to initialize modem since Start Time (ST).
<b>R</b>	Reset	The number of resets of modem since Start Time (ST).
<b>SP</b>	Status Pin	The number of times when modem was turned ON and turned OFF unsuccessfully.
<b>GPRS service</b>		
<b>GPRS</b>	General Packet Radio Service	Status of GPRS. There are two possible values: 0 – no GPRS / 1 – attached to GPRS.
<b>O</b>	Opened	The number of opened GPRS sessions.
<b>C</b>	Closed	The number of closed GPRS sessions.
<b>E</b>	Error	The number of GPRS errors.
<b>Link with server (LK)</b>		
<b>O</b>	Opened	The number of opened links.
<b>C</b>	Closed	The number of closed links.
<b>E</b>	Error	The number of link errors,
<b>TMO</b>	Timeout	The number of server response timeout.
<b>Reset</b>		
<b>RS</b>	Reset	FM device last reset source. Possible causes: 08, 03, 01 – reset was because of modem power loss; 04 – reset because of watchdog; 10 – reset because of Firmware update;

Example: *pass gsminfo*

Response example: *ST:2013.04.20 23:26:33; OP 22210,lvl 15,LAC 20030, CID: 28289; M:I 126, R 125, SP: 0; GPRS 0:O 64, C 0, E 248; LK:O 575, E 1, TMO 126; RS: 04*

## Reset

SMS message is used to reset FM device.

Example: *pass reset*

Response example: *Resetting device*

## Connect – custom connection

SMS message is used to force FM device to connect (for one time) to server with custom IP, port and protocol settings. FM device creates dummy record just with header part. Triggered event ID = 0 (zero). SMS has three parameters. SMS format: *pass connect IP,Port,Protocol*

Parameter	Description
IP	32-bit number, commonly known as an Internet Protocol address (xxx.xxx.xxx.xxx).
Port	16-bit number, commonly known as the port number (xxxxx).
Protocol	The principal of communication. There are two available protocols: TCP and UDP.

Example: *pass connect 192.168.0.1,7011,TCP*

Response example: *connection data ok*

## Econnect – emergency custom connection

SMS message is used to force FM device to connect (for one time) to server with custom APN, user, pass, IP, port and protocol settings. FM device creates dummy record just with header part. Triggered event ID = 0 (zero). SMS has five parameters. SMS format: *pass econnect apn,apnLogin,apnPassword,IP,Port,Protocol*

Parameter	Description
APN	An Access Point Name (APN) is the name of a gateway between a GPRS (or 3G, etc.) mobile network and another computer network, frequently the public Internet.
User	User name for APN settings.
Pass	Password for APN settings.
IP	32-bit number, commonly known as an Internet Protocol address (xxx.xxx.xxx.xxx).
Port	16-bit number, commonly known as the port number (xxxxx).
Protocol	The principal of communication. There are two available protocols: TCP and UDP.

Example: *pass econnect apn,apnlogin,apnpass,192.168.0.1,7011,TCP*

Response example: *Emergency connection data ok*

## Getapn – get APN parameters

SMS message is used to get APN, username, password, IP, port and protocol settings (described in 3.1.6) from FM device.

Example: *pass getapn*

Response example: *APN: User: PSW: IP: Port: 0 TCP/UDP: 0*

\*TCP/UDP: if 0 – TCP, if 1 – UDP.

## Setconnection – change connection configuration

SMS message is used to permanently change FM device configuration settings: APN, APN username, APN password, protocol, IP1, PORT1, IP2, and PORT2 (parameter description: 3.1.6).

SMS format: *pass setconnection apn,apnlogin,apnpass,Protocol,IP1,Port1,IP2,Port2*

Example: *pass setconnection apn,apnlogin,apnpass,TCP,111.111.111.111,1111,222.222.222.222,2222*

Response example: *set connection data ok*

If one of the parameters should be preserved, then the specific location for the parameter should be filled with *\*old\**. For example, ip1 and port1 should be preserved (old value should remain):

Example: *pass setconnection apn,apnlogin,apnpass,TCP,\*old\*,\*old\*,222.222.222.222,2222*

Response example: *set connection data ok*

If the message is not ending with port2, then those parameters, which are not mentioned in the message should not be changed. For example ip2 and port2 were not in the message:

Example: *pass setconnection apn,apnlogin,apnpass,TCP,111.111.111.111,1111*

Response example: *set connection data ok*

If configuration failed to set when FM device sends response: *Set connection data incorrect*

### **Switchip – switch primary IP and port**

SMS message is used to change current primary IP and port (IP1, Port1 or IP2, Port2).

SMS format: *pass switchip X*

X – which IP and port should be primary

IP1 primary set example: *pass switchip 1*

Response example: *Setting primary IP OK*

IP2 primary set example: *pass switchip 2*

Response example: *Setting primary IP OK*

If the operation was unsuccessful then the answer is: *Setting primary IP FAIL*

### **Plock – lock/unlock IP and port parameters**

SMS message is used to lock/unlock possibility of changing IP or port parameters. Lock/unlock passwords are 32-bite long and are provided by Ruptela support. Be careful with this SMS command.

SMS format: *pass plock plockPassword*

Example: *pass plock aNmuxyBxxr83jumWuBkx1rxkq8eZaeC*

Response example: *plock OK*

If the operation was unsuccessful then the answer is: *plock ERROR*

### **Setio – set outputs**

SMS message is used to set Dout1 and Dout2 output level. Values: 0 – low, 1 – high, 2 – do not change. Remember: Douts have to be connected to electric circuit correctly.

SMS format: *pass setio X1,X2*

X1 – state of Dout1

X2 – state of Dout2

Example: *pass setio 0,1*

Response example: *SETIO configuration data ok*

If configuration SMS is incorrect, device will response: *SETIO configuration data incorrect*

### **Getio – read inputs/outputs states**

SMS message is used to get status about Dout1, Dout2, Din1, Din2, Din3, Din4, Ain1 and Ain2. Values: 1 – high, 0 – low. Analog inputs – millivolts.

SMS format: *pass getio*

Answer SMS format: *DIN1=X,DIN2=X,DIN3=X,DIN4=X,DOU1=X,DOU2=X,AIN1=Y,AIN2=Y*

X – Digital value: 1 – high, 0 – low.

Y – analog value in millivolts.

Example: *pass getio*

Response example: *DIN1=0,DIN2=1,DIN3=1,DIN4=1,DOUT1=0,DOUT2=0,AIN1=4210,AIN2=8600*

### Delrecords – delete all records

SMS message is used to delete all records from internal (flash or SD card) FM device memory.

Example: *pass delrecords*

Response example: *All records deleted*

### Modrev – modem revision

SMS message is used to get modem revision information. Answer SMS format: *Modem revision: 24\_symbol\_info*

Example: *pass modrev*

Response example: *Modem revision: 1137B06SIM900M64\_ST*

### Caninfo – can configuration info

SMS message is used to get information about CAN settings of FM device (except FM Eco). These settings are used to see exact CAN interface configuration. Answer SMS format: *CAN enable: X Manufacturer Y Type Z Active A*

Parameter	Description																				
CAN enable	0 – CAN is disabled / 1 – CAN is enabled, FMS standard mode / 2 – CAN is enabled, LCV mode / 3 – CAN is enabled, OBD mode / 4 – CAN is enabled, Tachograph mode.																				
Manufacturer*	Manufacture group of Light Commercial Vehicles (number value). <table border="1"><thead><tr><th>Value</th><th>Name</th></tr></thead><tbody><tr><td>1</td><td>VAG</td></tr><tr><td>2</td><td>Mercedes</td></tr><tr><td>3</td><td>Citroen</td></tr><tr><td>4</td><td>Ford</td></tr><tr><td>5</td><td>Fiat</td></tr><tr><td>6</td><td>Opel</td></tr><tr><td>7</td><td>Renault</td></tr><tr><td>8</td><td>Toyota</td></tr><tr><td>9</td><td>FMS Tractor</td></tr></tbody></table>	Value	Name	1	VAG	2	Mercedes	3	Citroen	4	Ford	5	Fiat	6	Opel	7	Renault	8	Toyota	9	FMS Tractor
Value	Name																				
1	VAG																				
2	Mercedes																				
3	Citroen																				
4	Ford																				
5	Fiat																				
6	Opel																				
7	Renault																				
8	Toyota																				
9	FMS Tractor																				
Type*	Type of Light Commercial Vehicle (number value).																				
Active	1 – CAN mode is active mode, 2 – CAN mode is silent mode.																				

\*see *LCV\_select.txt* file in newest FM *Configurator* folder for up-to-date information.

Example: *pass caninfo*

Response example: *CAN enable: 2 Manufacturer 2 Type 1 Active 0*

\* CAN mode is LCV, vehicle manufacture group Mercedes, type is mercedes1, can is in silent mode.

### Fastsleep

SMS message is used to shorten sleep time period to 30 seconds (default: 10 minutes) for one time (current time). Usually this command is used just for testing purpose.

Example: *pass fastsleep*

Response example: *Fast sleep after 30 s*

### **Getsd – SD card info**

SMS message is used to get information about SD card inserted into FM Tco or FM Pro device. There are 2 available answers.

SD card is inserted: *Using SD Card. Size: sector\_count x sector\_size B, H: SDrecordHead, T: SDrecordTail*

<b>Parameter</b>	<b>Description</b>
sector_count	the number of sectors in SD card.
sector_size	the size (in bytes) of one sector in SD card.
SDrecordHead	SD card address of the last of record's end.
SdrecordTail	SD card address of beginning of the first record.

SD card is not inserted: *Using Internal Flash*

Example: *pass getsd*

Response example: *Using SD Card. Size: 3911680 x 512 B, H: 6008, T: 5993*

### **Clear obd – clear OBD values**

SMS message is used with FM Tco OBD (00.03.XX) device. Purpose is to clear all OBD related data in device memory (not configuration). It can be assumed as OBD values reset command.

Example: *pass clear obd*

Response example: *OBD parameters and DTC cleared*

### **IEversion – TCO extender version**

SMS message is used with FM Tco TCO (00.04.XX) device. Purpose is to get extender's (optional external FM gadget) version. Answer SMS format: *conf:X,ver:Y*

X – status of extender gadget: 0 – no extender / 1 – tachograph is connected to Port A via extender / 2 – tachograph is connected to Port B via extender / 3 – tachograph is connected to FM Tco TCO device CAN.

Y – extender firmware version (text).

Example: *pass ieversion*

Response example: *conf:1,ver:IE.00.01*

### **Tacho – tachograph status**

SMS message is used get tachograph status information. Answer SMS format: *TACHO status:X*

<b>Status (X)</b>	<b>Description</b>
0	Not available.
1	Everything is OK.
2	Tacho parameters not configured.
3	Extender not responding.
4	Tacho task is in progress.
5	Physical communication OK, logical is not OK.

Example: *pass tacho*

Response example: *TACHO status:1*

### **Clear OBD – deletes OBD related data from flash**

Deletes saved On-board diagnostic data from memory. Answer SMS format: „clear OBD parameters and DTC“

Example: *pass clear obd*

Response example: *clear OBD parameters and DTC*