Commands for GPS/GLONASS-receiver configuration

Use this command to handle the GPS/GLONASS-receiver.

Syntax:
#1> gps [options] [command]

```
Options:
  -t=<level>  - turn trace level (1, 2 or 0 - turn trace off)
       -a[=(0:1)]  - turn the power on the antenna amplifier
      -p=<port>   - set TCP port for service (2323 by default)
  -s=<baudrate|0>  - set baud rate for GPS NMEA port (0 - set 115200)
  -c=<con_mask>    - set current constellation:
                1  - GPS
                2  - GLONASS
                3  - GPS+GLONASS

Command:
  start       - start GPS service
  stop        - stop  GPS service
  coordinates - show  GPS coordinates
  console     - map GPS NMEA port to stdin/stdout
  tcp         - map GPS NMEA port to TCP service
  stat        - show GPS statistics
  clear       - clear GPS statistics
```

Options

Option	Description
-t=<level>	Configure event logging • "2" – to log all the NMEA-messages from the GPS/GLONASS-receiver • "1" – to log only the messages about discovering / loss of the GPS/GLONASS-receiver, about the changing of the quantity of detected satellites or about substantial changes of coordinates, etc. • "0" – event logging is off
-a[=(0:1)]	Enables / disables the power supply to the antenna amplifier (if one is available): • "1" - to enable the power supply (is used by default, if the value is not specified) • "0" - to disable the power supply
-p=<port>	Sets the TCP port for receiving debugging information. 2323 is set by default.
-s=<baudrate|0>	Sets the baud rate of the GPS NMEA port. • "*baudrate*" - the rate value. • "*0*" - sets the value to 115200.
-c=<con_mask>	Satellite navigation system selection: • "1" - GPS • "2" - GLONASS • "3" - GPS+GLONASS

Table - Command "gps" options

Title

Commands

Command	Description
start	Start the GPS service operation
stop	Stop the GPS service operation

coordinates	View information about the GPS/GLONASS-receiver status and its operation statistics
	
	Command output example,
	
	`#1> gps coordinates`
	`Satellites: 8`
	`LAT/LONG: 56.811911/60.547041`
	`Altitude: 275.89`
	`HDOP: 0.92`
	`FIX: 3D, GLONASS`
	`Total GPS time: 17:43:19`
	`Total nonvalid time: 00:00:01(0%)`
	`Number of losses: 0`
	`Now coordinates are valid last 17:43:18`
	`Satellites histogram:`
	`^`
	`|`
	`2.0 +`
	`|`
	`3.0 +`
	`|`
	`4.0 +`
	`|`
	`5.0 +`
	`| <1%`
	`6.0 +`
	`| 1%`
	`7.0 +`
	`|||||||||||||||||||||||||||||||||||||||||||||||| 99%`
	`v`
	`SATmin= 5 SATmax= 10`
	
	• "Satellites" - quantity of currently visible satellites
	• "LAT/LONG" - geographical coordinates of the receiver in degrees:
	  • "LAT" - latitude from -90.0000000° to +90.0000000°
	  • "LONG" (longitude) - longitude from -180.0000000° to +180.00000°
	• "Altitude" - altitude in meters
	• "HDOP" - horizontal dilution of precision
	
	CAUTION
	It is recommended to use values of “HDOP” parameter up to 1.5 for reliable global timing synchronization.
	
	• FIX - NO FIX|2D|3D, <unknown>|GPS|GLONASS|GPS+GLONASS – the current position-fix status in the following view: <current fix mode>, <system>. The following values of <current fix mode> are available:
	  • "NO FIX" - coordinates are not fixed
	  • "2D" – only latitude and longitude are fixed
	  • "3D" – latitude, longitude and altitude are fixed.
	
	The following values of <system> (currently used GNSS) are available:
	
	• GPS
	• GLONASS
	• GPS+GLONASS.
	
	The next block of information is the statistics (to obtain these data without information about status of GPS/GLONASS-receiver you can use "*gps stat*" command instead).
	
	• "Total GPS time" — total time of GPS utility operation since it was started by "gps start" command
	• "Total nonvalid time" – total time during which the information about coordinates was unavailable
	• "Number of losses" — quantity of cases when the information about coordinates had become unavailable
	• "Now coordinates are valid last …" - time of GPS utility operation since last coordinates discovering
	• "Satellites histogram" - the histogram of visible satellites quantity
	• "SATmin" и "SATmax" — minimum and maximum of visible satellites respectively (since the last time you cleared the statistics)

console	Displays an information in GPS NMEA format, is used for debugging. The GPS/GLONASS-receiver should be stopped
tcp	An information in the GPS NMEA format is transmitted to the TCP port assigned earlier by the "*-p*" parameter. The GPS/GLONASS-receiver should be stopped
stat	View GPS/GLONASS-receiver operation statistics(without the status information)
clear	Reset the statistics data

Table - "gps" command arguments

CAUTION

Please note, that "*tcp*" and "*console*" commands and *"-p*" and "*-s*" options are used for diagnostics and debugging on emergency by specialists only.