

# Template:GPRS settings

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## GPRS Settings



- **APN** - Access point name, mandatory parameter which is used connect to internet (GPRS).
- **APN Username** - Access point username (optional - depending on operator).
- **APN password** - Access point password (optional - depending on operator).

Some operators use specific type of authentication for GPRS session - **CHAP** or **PAP**. If any of these is used, APN should be entered as "chap:<APN>" or "pap:<APN>" respectively e.g. if operator is using APN "internet" with CHAP authentication, it should be entered as "chap:internet". Information about APN and authentication type should be provided by your GSM operator.

## Server Settings

The screenshot shows a 'Server Settings' dialog box with the following elements:

- Domain:** An empty text input field.
- Port:** A numeric input field containing the value '0'.
- Protocol:** Two buttons: 'TCP' (highlighted in blue) and 'UDP' (grey).
- Encryption:** Two buttons: 'None' (highlighted in blue) and 'TLS/DTLS' (grey).

- **Domain** - Server IP or DNS address.
- **Port** - Server port.

This section allows setting the protocol used for data transfers - **TCP** or **UDP**. Also it is possible to choose if the encryption for sending the records should be used.

## Second Server Settings

**Second Server Settings**

Backup Server Mode

Disable	Backup
Duplicate	

Backup Server Domain

Backup Server Port

Backup Server Protocol

TCP	UDP
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Encryption

None	TLS/DTLS
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Backup server settings can also be selected for *Backup* server.

Backup server has 3 different modes:

- **Disable** - backup server is not used.
- **Backup** - records are sent to backup server if main server is not available (for example fails to open link) or when main server response timeout is reached successively 5 times.
- **Duplicate** - records are sent to both servers (main and backup), records are deleted from SD-card (or RAMS) only if both servers accepted the records.

## Records Settings

**Records Settings**

Open Link Timeout (s)

Response Timeout (s)

Network Ping Timeout (s)

Sort By

Newest	Oldest
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ACK Type

TCP/IP	AVL
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Permanent link

Disable	Enable
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- **Open Link Timeout** - Parameter is used to set timeout of the link between the device and AVL server. If device has send all the records it waits for the new records before closing the link. If the new record is generated and the link is still open, it is sent to the server immediately without waiting for send period. If new records are generated during the period of this timeout and minimum count to send is reached, the records are sent to AVL application. This option is useful when GSM operator charges for link activation.
- **Response Timeout** - Time period device waits for server response.
- **Network Ping Timeout** - Enables network ping after timeout to prevent link close by the operator. If the value set to 0, it disables the functionality.
- **Sort by** - Here X device will send the newest records first when **Newest** is selected, which is useful in cases when the most important parameter set is the most recent one, as a result other records will be sent right after the newest records are received by AVL application.
- **ACK Type** - Possible to choose TCP/IP or AVL type
- **Permanent link** - The permanent link feature is designed to establish a connection with the server and maintain a connection to facilitate access to and management of the device using GPRS commands. Connection with main server is initiated as soon as possible after device start. In case if device failed to establish connection with main server or connection was lost, then device tries to connect to backup server (if configured). If device has successfully connected to backup server, then device keeps working with backup server until connection is lost. After that all cycle is repeated if necessary. **When Permanent link feature is enabled, then device does not take Open Link Timeout into account.**

 **Maximum** value of the **Open Link Timeout** and **Response Timeout** should be **60** sec. We recommend to leave default value - **30** sec. for the best battery performance.

# FOTA WEB Settings



These settings are used to configure FOTA WEB server connection parameters.

- **Status** enables or disables FOTA WEB functionality.
- **Domain** - Address of FOTA website.
- **Port** - Port number of FOTA website.
- **Period** - is used to set the timeout of repeat connections to the FOTA WEB server.