

GSW1

Simple Universal GSM controller



USER MANUAL

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1 FOR YOUR SAFETY

SWITCH ON SAFELY

Do not switch the unit on when use of wireless phone is prohibited or when it may cause interference or danger.

INTERFERENCE

All wireless phones and units may be susceptible to interference, which could affect performance.

SWITCH OFF IN HOSPITALS

Follow any restrictions. Switch the unit off near medical equipment.

SWITCH OFF IN AIRCRAFT

Follow any restrictions. Wireless devices can cause interference in aircraft.

SWITCH OFF WHEN REFUELING

Do not use the unit at a refueling point. Do not use near fuel or chemicals.

SWITCH OFF NEAR BLASTING

Follow any restrictions. Do not use the unit where blasting is in progress.

USE SENSIBLY

Use only in the normal position as explained in the product documentation. Do not touch the antenna unnecessarily.

2 INTRODUCTION

GSW1 is a simple GSM switch system designed to ensure low-cost, simple to install/use, reliable and single box solution for remote managed switching application. It is designed for unlimited range caller ID control.

Optional GSW1 supports alarm detection, stay-alive messages, credit detection etc...

3 GSW1 FEATURES AND APPLICATIONS

Features:

- ⇒ Built-in 4 (2G) or 5 (3G) band GSM module
- ⇒ Caller ID numbers control (up-to 100 caller ID numbers)
- ⇒ 1 output (relay supported)

- ⇒ Programming with PC via “USB to Mini USB cable” connected to the unit
- ⇒ Programming by WEB server
- ⇒ Programming by SMS commands

Applications:

- ⇒ Remote gate opener – Caller ID number recognition

4 START UP

GSW1 unit accepts a standard GSM SIM cards from any network.

**VERY
IMPORTANT**

USE A MICRO SIM CARD



WARNING

DO NOT Insert or remove the SIM card while the unit is powered ON!!

IMPORTANT

Before inserting SIM card to unit make sure the PIN code is removed!!

- ⇒ Insert SIM card in GSW1 unit.
- ⇒ Connect power cable to GSW1 unit (YOU MUST POWER THE GSW1 UNIT WITH THE POWER SUPPLY IF INCLUDED. Do not power with any other power supply).
- ⇒ Power up the unit.
- ⇒ Wait until LED1 (Green) starts flashing. This is set in around 30 – 45 seconds.
- ⇒ GSW1 unit is now ready to operate.

5 LED INDICATION

Green LED (LED1)

- Indicates the level of the GSM signal from 1 to 5 LED flashes (1 is weak signal, 5 is excellent signal)

Yellow LED (LED3)

- Short flashing indicates that the GSM module is ON, but it is not yet connected on the GSM network. After connection, yellow led is flashing with short pulse (0,5s) ON and a long pulse OFF (5s).

6 CONNECTION DIAGRAM

Before connection the GSW1 please take a look at connection diagram.

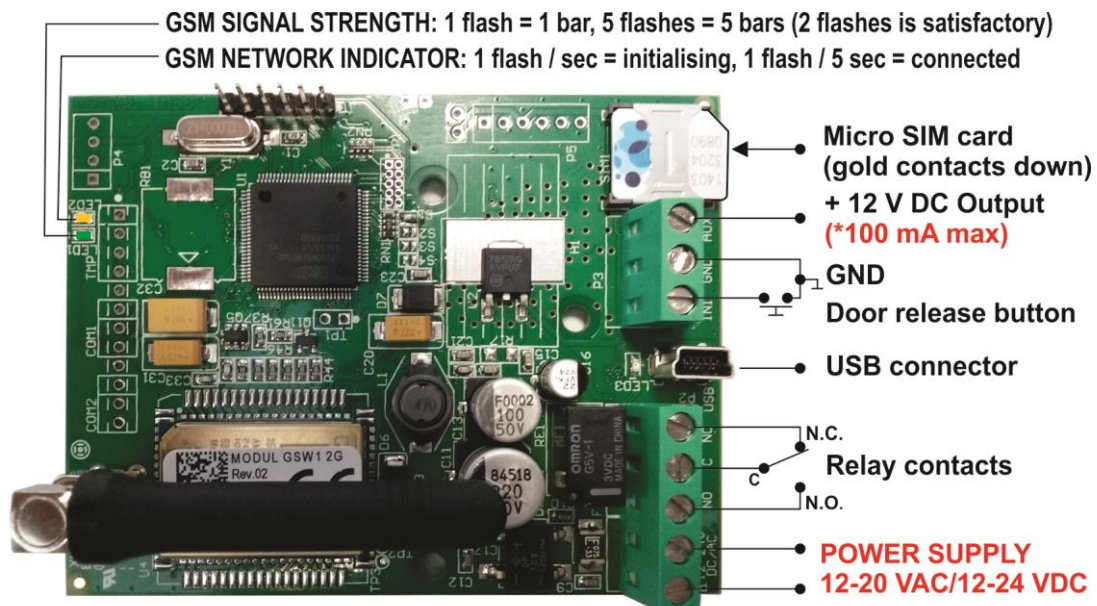


Figure 1: GSW1: Connection diagram

IMPORTANT

DO NOT USE Power out (12V AUX) for electric lock driving! Use separate power source for door electric lock!

7 GSW1 UNIT MANAGEMENT

Unit supports different types of management (programming):

- ⇒ Unit can be programmed directly by USB connection, with the use of configuration software running on PC (EasySet).
- ⇒ Unit can be programmed remotely by using WEB server access.
- ⇒ Unit can be programmed remotely by SMS commands (Optional).

8 GSW1 FUNCTIONS WITH PROGRAMMING INSTRUCTIONS

As mentioned in previous chapters GSW1 unit can be programmed in various ways, this document will focus on most common programming way: WEB programming.

IMPORTANT

SIM card in the GSW1 unit **MUST have DATA PLAN** to be able to use WEB programming!

8.1 WEB SERVER - LOG IN

The web server can be find under the address: <http://www.easyset.eu/>.

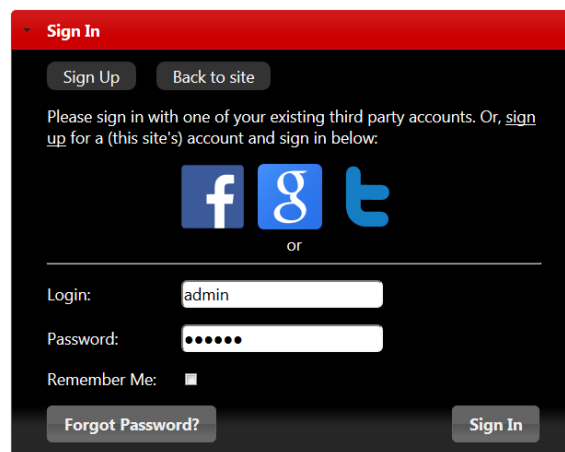


Figure 2: WEB Server-Sign In page

User must first use the Sign IN section to create working profile on the server. The profile can be created by using social login like Facebook, Google account or Twitter. The user lacks any of the social profile it can proceed to Sign UP page use standard user name and password entry.

NOTE

Server support Firefox, Google Chrome, Safari.

8.2 WEB SERVER – ADDING UNITS TO USER PROFILE

After login the user will be diverted to WEB server main window. This page is used to add/remove/search for GSW1 units from the user's profile.

Select “+” sign to select ADD GSW1 units to user's profile.

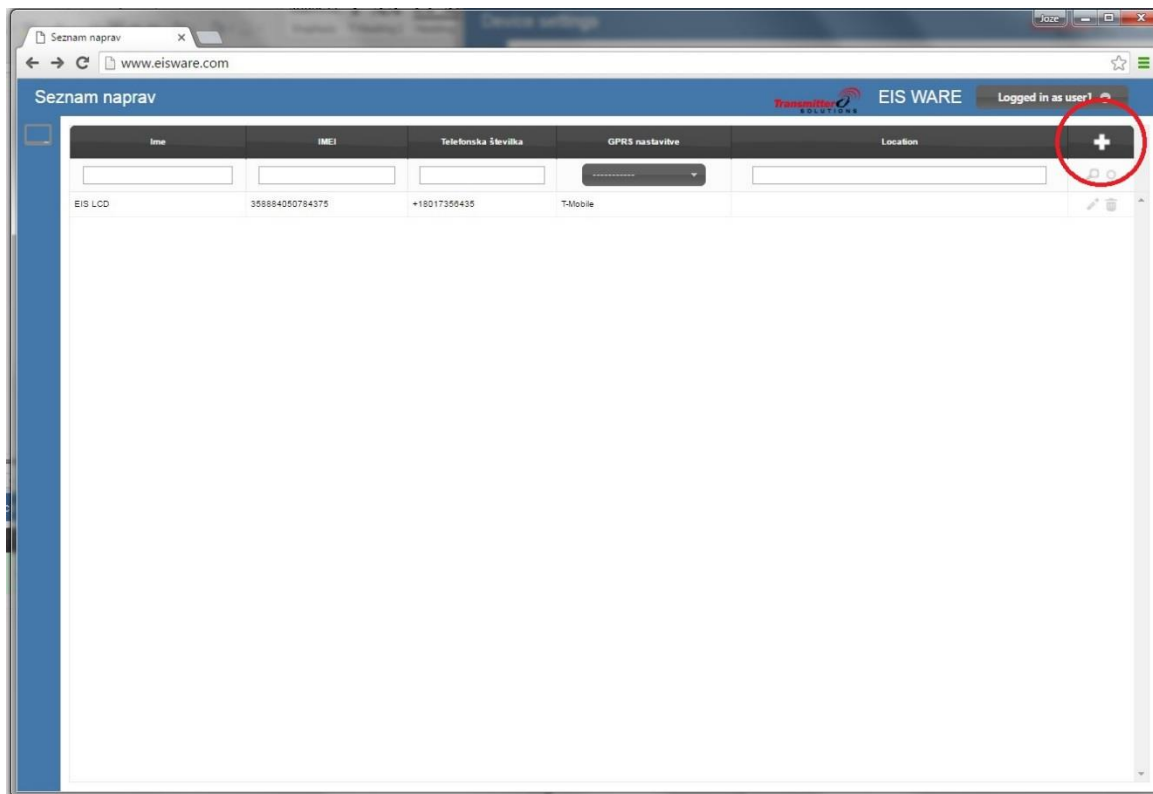


Figure 3: WEB Server-Main page select ADD mode

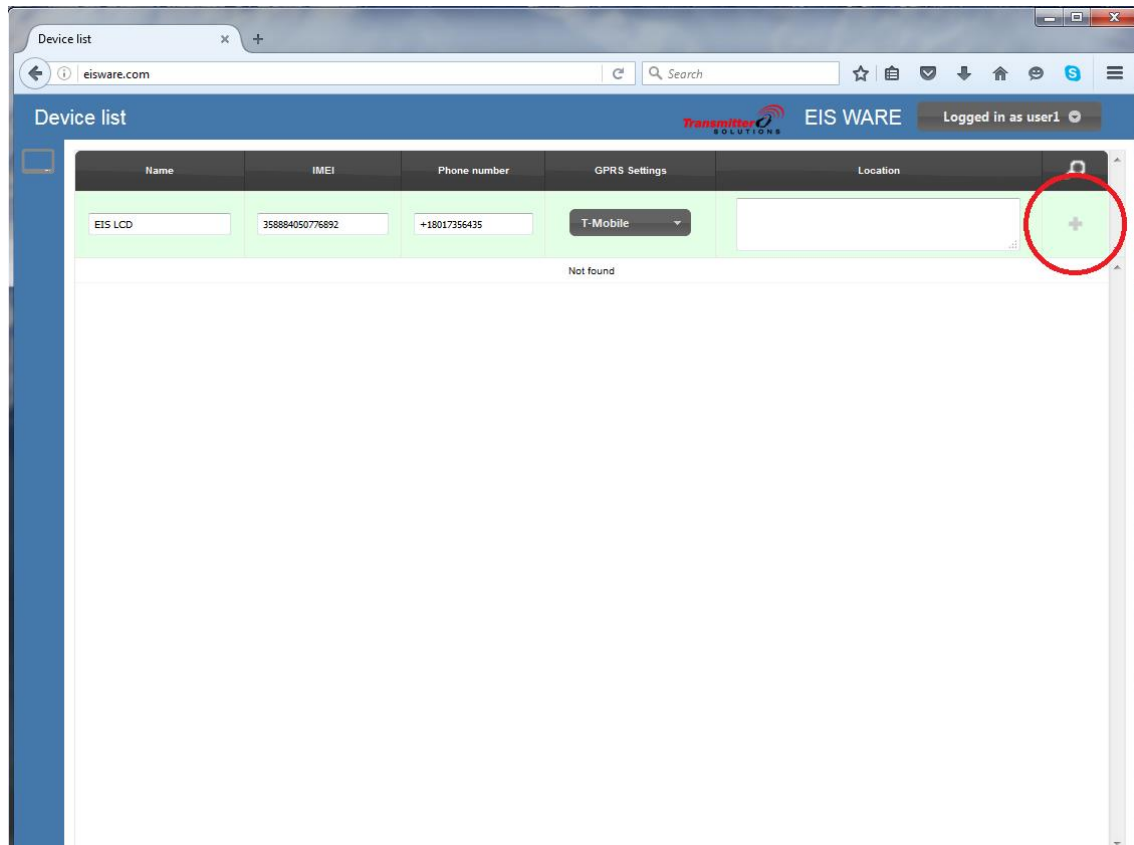


Figure 4: WEB Server-Main page adding GSW1 units

User than provides required data:

- **Name:** Name for the added unit - mandatory information.
- **IMEI:** Identification number of the unit, can be found in the enclosure of the unit - mandatory information. The IMEI is located on the cellular chip and also should be on the card board box of the GSW1.
- **Phone Number:** The telephone number of the SIM card in the GSW1 unit - mandatory data.
- **GPRS settings:** Information needed to enable data connection between the server and the unit. Selectable from the drop-down menu - mandatory data.
- **Location:** Notification field, used by the user to provide extra data for its own information - optional data.

By clicking the “+” (insert sign) after filling mandatory data, the unit will be added to the user profile.

First building of the unit data-base may take a few minutes.

8.3 WEB SERVER-UNIT MANAGEMENT

After the GSW1 unit is added to user database, the user can change the configuration of the specific unit.

All changes made by the user are listed in the **Change Log** window. By clicking **Send to device** button ALL changes are send to the unit. User can revert all changes made, before sending, by clicking **Revert all** or select particular entry and revert it.

The screenshot displays the 'Device settings' interface for a GSW1 unit. The 'Device' section includes fields for Name (EIS LCD), Type (EIS-LCD), Imei (358884050550487), Phone number (+38640168647), Location, GPRS settings (T-Mobile: epc.tmobile.com), and Status time (25.06.2016 15:15:56). A 'Change log' window is open, showing a list of changes: 'Intercom / table' and 'Pin access / table'. The 'Send to device' and 'Revert all' buttons are highlighted in red. The 'Settings' section is visible below, with tabs for Intercom, Pin access, Caller id #, Outputs, Digital interface, Inputs, Temporary pin access, Service button, Administration, Misc, and Event log. The 'General' tab is active, showing 'Tables control mode' set to 'Joint (WINF1 & WINF2 Control Table 1 & Table 2)'. Two tables are displayed: 'Table 1 output' (Output 1) and 'Table 2 output' (Output 2). Both tables have columns for Position, PIN, and User name.

Position	PIN	User name
PIN1	2233	Mark
PIN2	0	
PIN3	0	
PIN4	0	
PIN5	0	
PIN6	0	
PIN7	0	
PIN8	0	

Position	PIN	User name
PIN251	0	
PIN252	0	
PIN253	0	
PIN254	0	
PIN255	0	
PIN256	0	
PIN257	0	
PIN258	0	

Figure 5: WEB Server-Unit management window

8.4 CALLER ID ACCESS

Caller ID access is a very simple way to control relay output defined in **Caller ID output** setting.

User will by calling in the GSW1 unit trigger defined output.

Settings for this function are found in the **Caller id #** tab.

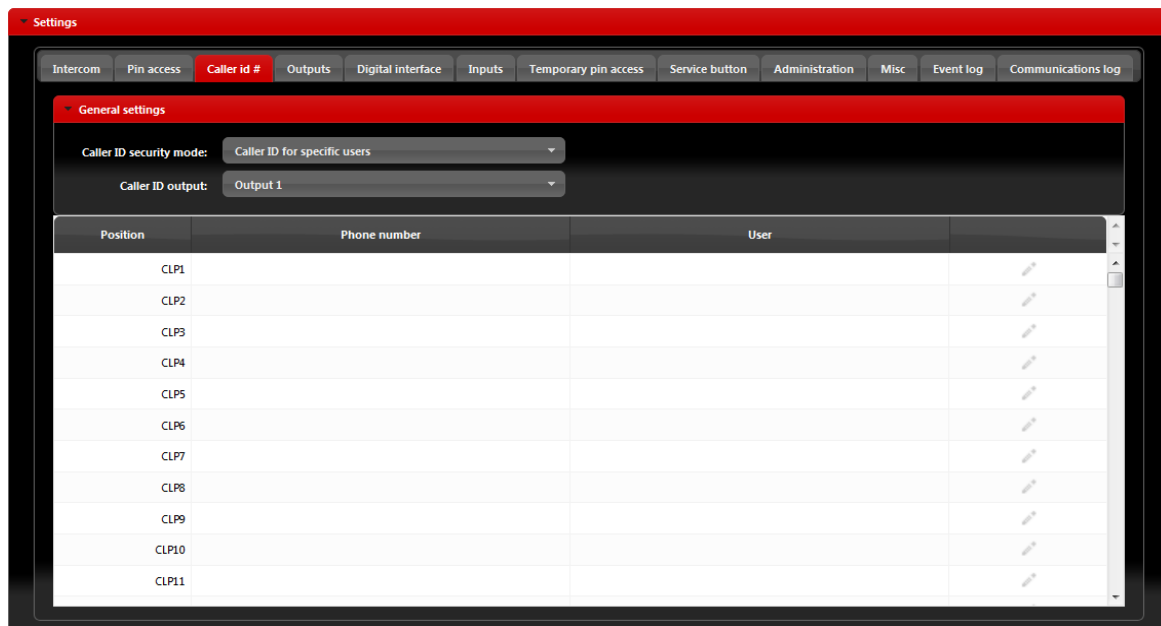


Figure 6: WEB Server-Caller ID Access

General settings:

- **Caller ID security mode:** Selecting *Caller ID Disabled* deactivates caller ID function – all numbers are restricted. Selecting *Caller ID for specific users* will limit the caller ID function only to the numbers on the list. Selecting *Caller ID always ON* will allow all users that know the number of the unit to open defined output. In last option the user doesn't need to be on the list to trigger the output
- **Caller ID output:** Selecting the output that will be triggered in Caller ID function.

NOTE

Selection *Caller ID always ON* will allow anybody with the knowledge of the unit number to trigger the output by calling the unit. Use this setting with caution.

8.5 OUTPUTS SETTINGS

The behavior on the outputs is defined in the **Output tab**.



Figure 7: WEB Server-Output setting

Output 1 - Settings for output 1:

- **Output (relay) mode:** User can select between 3 options
 - Disable*-Output is disabled.
 - Latching*-Output is in latching mode. First Caller ID event will activate the output, second Caller ID event will deactivate the output.
 - Time Pulse*-Output is time pulse mode. After output is triggered it will be activated for the time defined in **Output pulse duration**, after that time output will be restored.
- **Output pulse duration:** ON time for output in case of output mode *Timer pulse*.
- **Output is:** Output can work in normal or inverted (normally close) mode.
 - Normally open*-In idle mode output pins are in open position.
 - Normally closed*-In idle mode output connections are closed.

Additional output settings - Setting are used to link onboard actions with the outputs if needed:

- **Unauthorized call or SMS received:** If unauthorized call or SMS is received on the unit this event will activate output defined under this section.
- **Input 1 activate output:** If input 1 is activated this action will activate output defined under this section.

NOTE

Do to limitation of the outputs use additional outputs settings with care.

8.6 ADMINISTRATION

Administration tab allows user to enable advanced settings: notification of unauthorized access, periodic test messages, lock down of the unit...

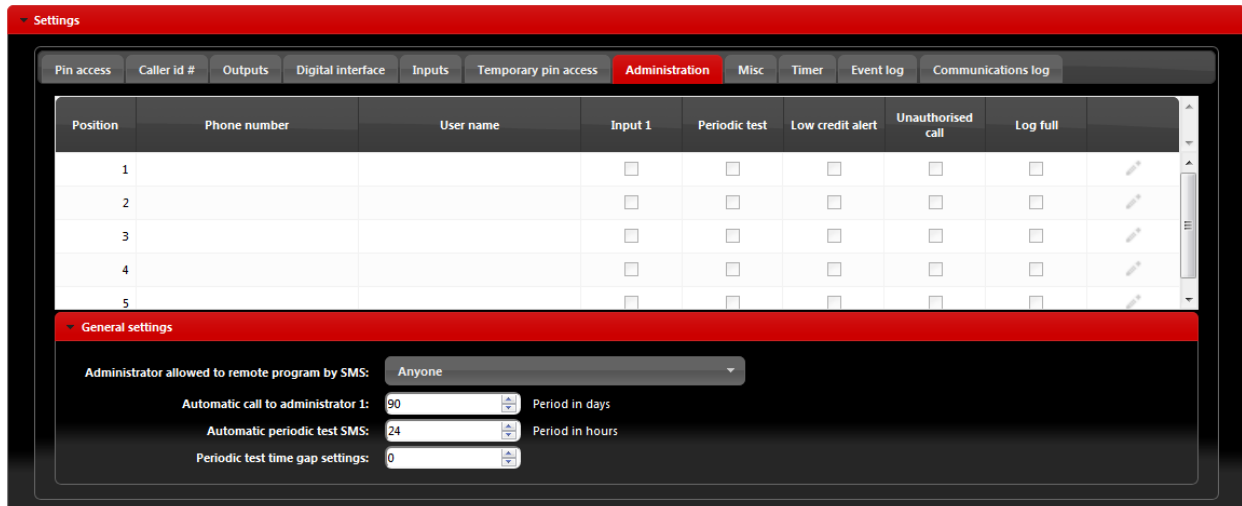


Figure 8: WEB Server-Notification numbers

- **Phone number, User name:** Phone number and user name of the user that will be receiving notification messages.
- **Input1:** If on input line 1 alarm condition is met, users with check boxes will receive alarm notification SMS.

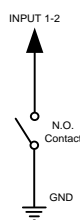


Figure 9: WEB Server-Input alarm configuration

- **Periodic test:** User can receive periodic (keep-alive) SMS, tick the check box for the appropriate user. Timer period is defined under parameter **Automatic periodic test SMS**, it is definable in hours.
- **Low credit alert:** In case of prepaid SIM card the unit can notify the user if the credit on the SIM card is low. To enable notification SMS tick the check box in corresponding position. Note that additional input in the **Misc** tab is needed to fully enable credit checking function.

- **Unauthorized call:** In case of unauthorized call the unit can notify user. To enable notification SMS tick the check box in corresponding position.
- **Administration allowed to remote program by SMS:** By selection this option the user can “Lock down” the GSW1 unit, preventing any unauthorized user to change any configuration on the unit.
- **Automatic call to administrator 1:** To prevent SIM card provider to lock out the SIM card from the network, user can define a periodic call out to telephone number under position 1. Parameter is defined in days (It is not mandatory to set this parameter).

8.7 MISCELLANEOUS

This tab is split into 2 sections.

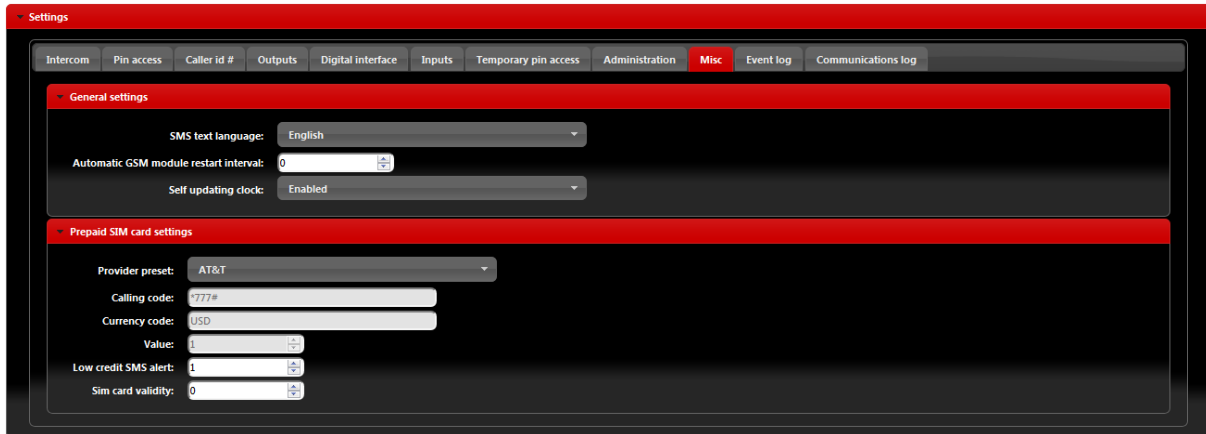


Figure 10: WEB Server-Misc

General settings can be found:

- **SMS text Language:** define the language of the SMS information send out. User can select appropriate language in drop-down menu.
- **Automatic GSM module restart interval:** User can select GSM module restart interval (hours) if needed (Not advisable to use this parameter if not advised otherwise).
- **Self-updating clock:** Parameter is used to allow unit to synchronize to real time. To have the correct time along in log event it is advisable to enable this function.

Prepaid SIM card setting is used the enable credit checking/parsing in case if prepaid SIM card is used. User can select the proper setting by selecting used SIM card provider in the drop down menu in **Provider preset**.

9 CONTACTS

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