

USER MANUAL

EPDU-SMS-Commander



This manual describes how to use the EPDU-SMS-Commander.

Generally, the EPDU-SMS-Commander is able to receive SMS messages, control Gude-EPDU devices accordingly and return feedback-status SMS messages to the user.

The EPDU-SMS-Commander is also able to show the current outlet-status of the Gude-EPDU on its webinterface and provide this status via SMS message.

Additionally, it is possible, to use the cellular mobile connection (2G/3G/4G-LTE) of the EPDU-SMS-Commander and realize a transparent remote-vpn-access to the LAN-network of your Gude-PDU, using the optional DIGICLUSTER-VPN-Security-Portal.

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1. Quick start

- Remove the SIM-slot-cover on the right side of the device and insert an activated SIM-card (Micro-SIM / 3FF).
- Attach the delivered antenna to port "ANT" and optimally to port "DIV" too.
- Connect the power-supply to port "PWR".
- Connect your PC via ethernet cable on port "ETH0".
- **Change** the **network settings** on your PC to **192.168.1.2** (255.255.255.0).
- The EPDU-SMS-Commander can be configured via WEB browser. The web interface can be accessed with the following access parameters:

Address: <https://192.168.1.1>

Username: **root**

Password: **P<last 8 digits of the serial number>h**

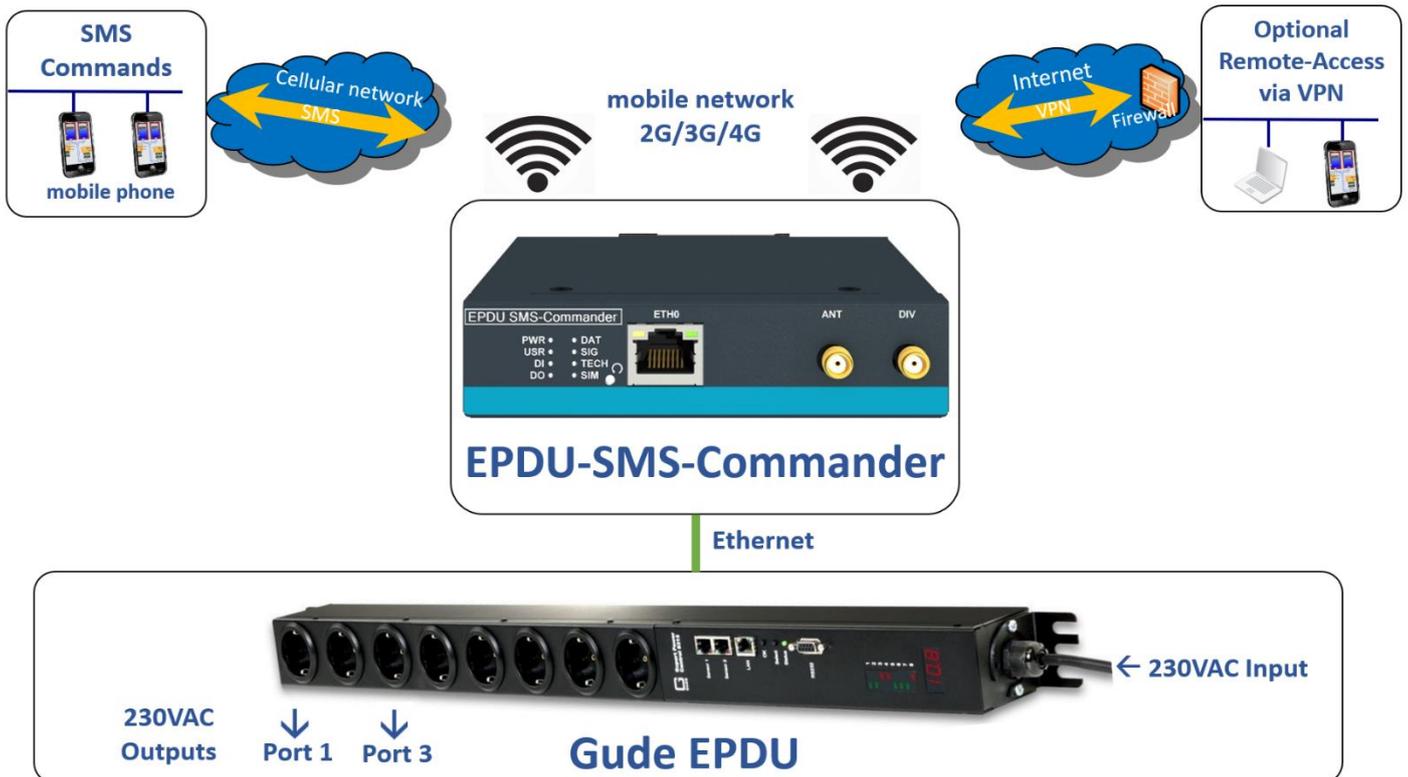
- Enter the PIN-Code of the SIM-card (in the menu "Configuration" → "Mobile WAN" → "PIN"). If the PIN is disabled, leave the field empty.
- If necessary, change the IP-address of the EPDU-SMS-Commander according to your local network (in the menu "Configuration" → "Ethernet" → "ETH0 Configuration").
- Choose the right pre-configuration for your use-case in the menu "Administration" → "Change Profile":
 - Profile "Standard" (default)
EPDU-SMS-Commander works via LAN & SMS, but without 2G/3G/4G mobile-data-connection.
 - Profile "Alternative 1"
EPDU-SMS-Commander works LAN & SMS and additionally via 2G/3G/4G mobile-connection. The EPDU-SMS-Commander connects to the internet (for optional VPN-remote-access) via mobile connection of your SIM card. Attention, data-traffic of your SIM card must be activated.
- To configure the main settings of EPDU-SMS-Commander, please use the webinterface under "**Customization**" → "**User Modules**" → "**SMS Commander**".

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2. Schematic diagram

For a better understanding of the solution, have a look on the schematic diagram:



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3. Configuration

The EPDU-SMS-Commander is able to receive/send about 20 SMS per minute. This value depends on some other circumstances as well, like the behaviour of your telco-provider for example.

To configure the main settings of EPDU-SMS-Commander, please use the webinterface under **“Customization” → “User Modules” → “SMS Commander”**.

Customization	User Modules
User Modules	SMS Commander 1.0.4 (2022-02-14) <input type="button" value="Delete"/>

3.1 Common Configuration

Configuration	
Common Configuration	
Enable/Disable SMS-Commander <input checked="" type="checkbox"/>	Enable/Disable the user module
Master Code <input type="text" value="1234"/>	Master code for security authentication (numeric). All commands need to contain this code
Reset Duration <input type="text" value="10"/>	Time duration for reset-command (off-time) in seconds

Enable/Disable SMS-Commander: The EPDU-SMS-Commander functionality will be enabled if the checkbox is checked.

Master Code: There can be a security-master-code (4 numbers) within the SMS message, which will be checked by the EPDU-SMS-Commander. If the correct code is not present within the SMS message, the SMS will be ignored by the EPDU-SMS-Commander. If the field “Master Code” is empty, the feature is deactivated and the EPDU-SMS-Commander will not check the incoming SMS messages for a security-master-code.

Reset Duration: Defines the time in seconds, for how long the power-outlet should be OFF at the Gude-PDU, in case a reset-command will be sent to the EPDU-SMS-Commander.

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3.2 Device Configuration

These following settings in the EPDU-SMS-Commander, are related to your Gude EPDU.

Device Configuration

Device Name
Name of location / rack / pdu

PDU via HTTPS
Access PDU config API via HTTPS (otherwise it will be plain HTTP)

Response SMS
Enable response SMS as reply to on/off/reset commands

PDU IP-address
IP-address of your Gude EPDU within the same network

PDU User/Password
Login-credentials of your Gude EPDU

Device Name: Define the name of your Gude EPDU, to be able to differentiate between more EPDU's. This name will be used for the status-SMS-messages and the response-SMS-messages.

PDU via HTTPS: Activate this checkbox, if you want to use a secured HTTPS communication between your EPDU-SMS-Commander and your Gude EPDU. HTTP communication will be used, if the checkbox is not checked.

Response SMS: Activate this checkbox, if you want to receive answer-SMS-messages as a reply to your on/off/reset-commands. The response-SMS consists of the device-name of your Gude EPDU and the information, if your command was executed successfully.

PDU IP-address: The EPDU-SMS-Commander needs to know the IP-address of your Gude EPDU, in order to set the power-outlets and the get the according status. The EPDU-SMS-Commander and the Gude EPDU need to be within the same network-segment.

PDU User/Password: The EPDU-SMS-Commander needs to know the login-credentials of your Gude EPDU, in order to be able to establish a secure communication. The default-values are "admin" & "admin".

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3.3 Current PDU State

This section in the EPDU-SMS-Commander shows the power-outlet-state of your Gude EPDU.

Current PDU State
PORT 1: on
PORT 2: on
PORT 3: on
PORT 4: off

Keep in mind:

The webinterface of the EPDU-SMS-Commander will **not** be updated automatically. This means, that you need to do a manual browser-refresh (F5), to see the latest state of your power-outlets.

4. System Log

SMS Commander

SMS Commander	System Log
Configuration	System Messages
Status	2022-02-14 09:16:55 smscommanderd[21616]: [smscommander] handle sms loop started
System Log	2022-02-14 09:16:55 smscommanderd[21616]: [smscommander] handle state loop started
Return	2022-02-14 09:17:32 https: user 'root' logged in from 192.168.1.203
	2022-02-14 09:17:34 smscommanderd[21616]: registered signal [15]
	2022-02-14 09:17:35 smscommanderd[21616]: stopped
	2022-02-14 09:17:36 https: user 'root' added user module 'smscommander-1.0.4.v2.tgz'
	2022-02-14 09:17:37 smscommanderd[21804]: [smscommander] module started
	2022-02-14 09:17:37 smscommanderd[21804]: [smscommander] handle sms loop started
	2022-02-14 09:17:37 smscommanderd[21804]: [smscommander] handle state loop started
	2022-02-14 09:19:28 https: user 'root' logged in from 192.168.1.203

If some diagnose is needed, you can have a look into the System-Log of the EPDU-SMS-Commander.

In case of support needed, it is useful to save and provide the [Log-File](#) and the [Report-file](#).

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5. SMS Commands

Description and examples of the SMS-commands, which can be sent to the EPDU-SMS-Commander:

5.1 Switching power-outlets

SMS-Command-Syntax: [on, off, reset] [portnumber] {mastercode}

SMS-Command-Examples:

- Switch OFF power-outlet 2, with mastercode 2222: off 2 m2222
- RESET power-outlet 6, with mastercode 2222: reset 6 m2222
- Switch ON power-outlet 1, without mastercode: on 1

Command / port-number / mastercode need to be separated through a blank-space. „Reset“ means, to switch „off“ a power-outlet for a specified time-duration and switch it „on“ again afterwards.

Response SMS:

The feedback-SMS-messages to the switching-commands can contain the following information, depending on your command:

- Device name: Example PDU
- Port 1: off -> on
- Port 1: on -> off
- Port 1: reset

5.2 Get status of power-outlets

SMS-Command-Syntax: [state] {mastercode}

SMS-Command-Examples:

- Status-request with mastercode 2222: state m2222
- Status-request without mastercode: state

Response SMS:

The feedback-SMS-messages to the status-request contains the following information:

- Device name: Example PDU
- Port state: 1=On 2=On 3=Off 4=Off 5=...

6. SIM card switching (failover)

This feature is only available for models with 2 SIM-card slots!

For reasons of high availability and redundancy, you can use both SIM slots of the EPDU-SMS-Commander with 2 SIM-cards of different providers.

If one SIM card loses registration to cellular network, the second SIM card gets active. Therefore, you have to enable the feature “Switch to other SIM card when connection fails” in “Configuration” → “Mobile WAN”:

Switch to other SIM card when connection fails

It might make sense for your application, to think about switching back to the default SIM card, after a certain timeout.

Switch to default SIM card after timeout

Initial Timeout	<input type="text" value="600"/>	min
Subsequent Timeout *	<input type="text" value="60"/>	min
Additive Constant *	<input type="text" value="5"/>	min

Initial Timeout: Time that the router waits before the first attempt to switch back to the default SIM card (from 1 to 10000 minutes).

Subsequent Timeout: Time that the router waits after an unsuccessful attempt to switch back to the default SIM card (from 1 to 10000 minutes).

Additive Constant: Time that the router waits for any further attempts to revert to the default SIM card. This time is the sum of the time specified in the “Subsequent Timeout” and the time specified in this parameter (from 1 to 10000 minutes).

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http://download.bellequip.at/Manual_EPDU_SMS_Commander_02.2022.pdf