Manual snow load-measuring system SMS

Version 3.00

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1 Introduction

This manual deals with the establishment of the network component of the snow load measuring system SMS.

- If a DHCP and DNS server is available on your local network, then continue directly with the **User settings**.
- Otherwise, a static IP address must be set up. This is explained in the following chapter **Network settings**.

Tip: Some indications and setting options are explained in detail on the web interface, if you point a little longer with the mouse over it.
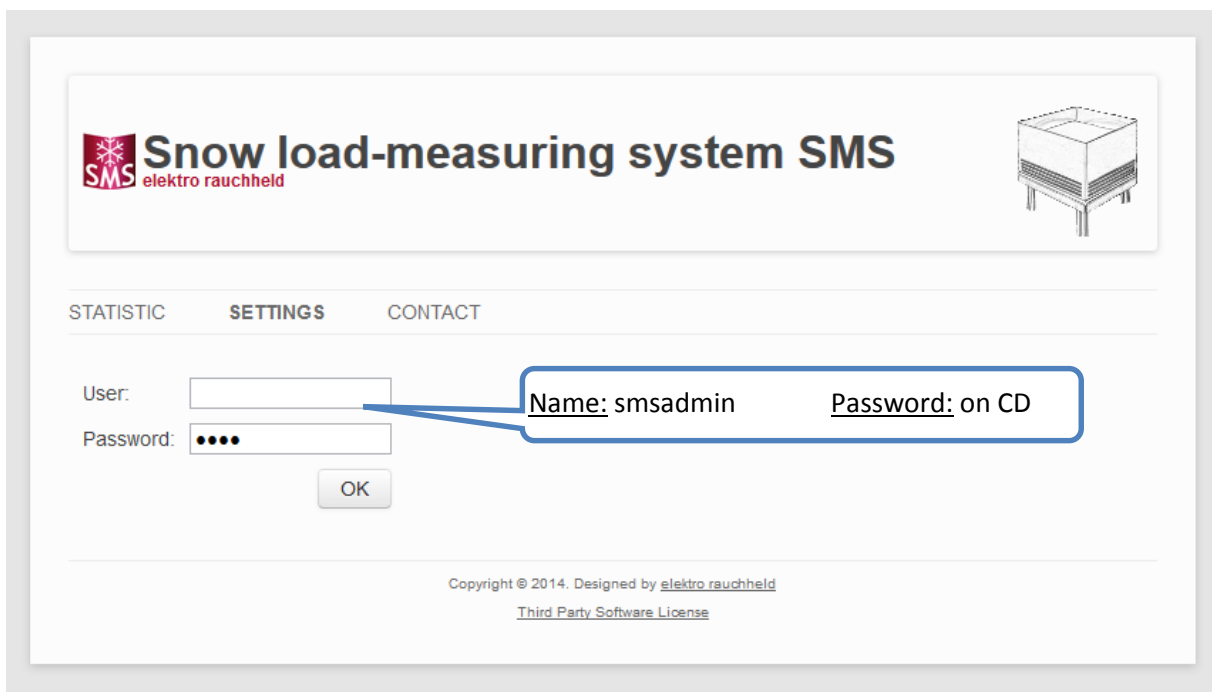
2   Admin settings

The admin settings should be used with caution because they may make the system unusable!
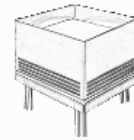
2.1   Network settings

Make sure that both the box, as well as the used computer are connected to the same physical network. You can set the network settings either via the web interface or via the SMS management program. This manual describes the procedure via the web interface and for the instructions for the SMS Management program, please refer to the appropriate manual.

Set your computer's IP address to 190.107.233.1. Then open a browser and navigate to the box default IP address 190.107.233.110. In the menu bar, click "Settings" and enter the user name "smsadmin" and the password, which is provided on the CD, for each box in the new screen.

This will take you to the following screen:

There you can configure the network settings according to your network. After clicking on the save button, the box reboots and can be reached under the network settings you entered. The other settings on this page are "measuring amplifier settings" explained in the following chapter.

2.2 Measuring amplifier settings

Here the pre- and alert level can be set. For problems with the measuring amplifier you will receive commands from us you can enter in the free text field to resolve this. For otherwise problems, you can use the button "Delete archive" and "Delete current values" to delete the

collected data. To further error analysis, you can click the "Export Report" button to create a report file, which you can send to info@elektrorauchheld.de.

3 User settings

To access the web interface, enter either the just assigned IP address or host name ("smshost0001" to "smshost9999") in the address bar of your browser. Then you get to the web interface. Go to Settings to complete the initial setup. From there, log on with the username "smsuser" and password of the CD.


3.1 Type settings

The type settings are based on how many devices you have in use and whether a network connection exist between the devices. If you have only one measuring system or the measuring systems do not have a network connection with each other, then you select the Standalone configuration, in other cases the Client/Server configuration.

3.1.1 Standalone configuration

The standalone configuration should be used when there is only one measuring system or the measurement systems have no network connection between them.
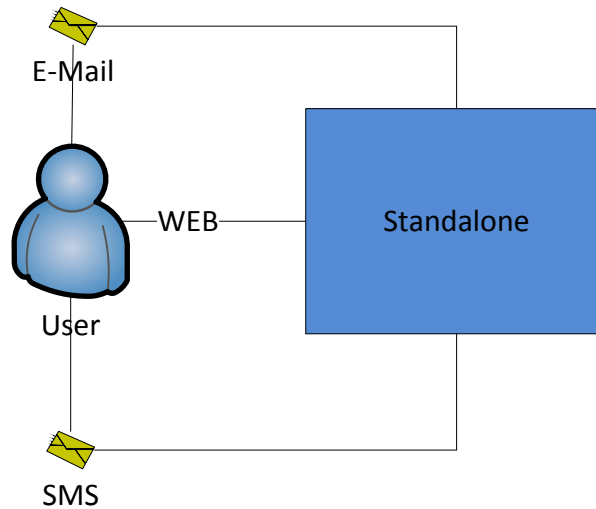

3.1.2 Client/Server configuration

In the client / server configuration there are basically two variants available. Both variants have in common that they each require a network connection between the boxes and the required port 80 is open. In addition, in both variants, only the servers are configured and the configuration of the clients is done automatically.
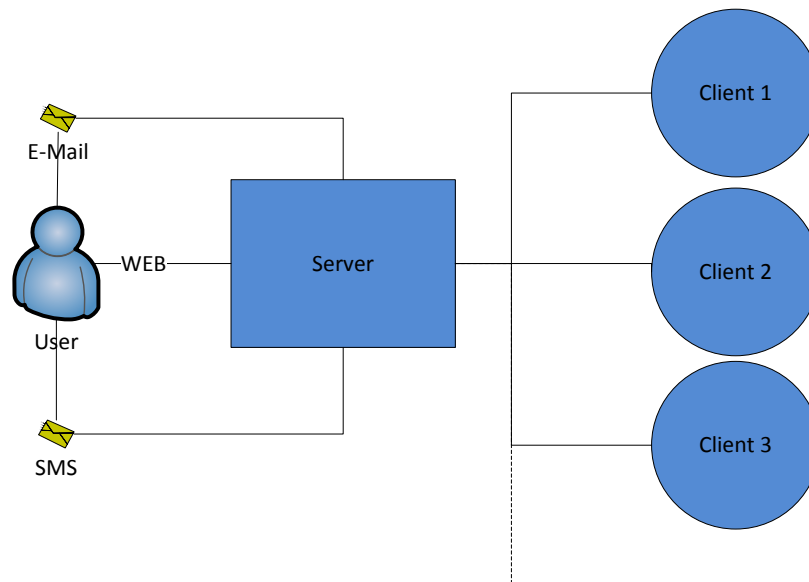
In the first variant, there is only one server and the remaining boxes are configured as clients. This has the advantage that a user has one central web interface for administration and in the case of an event receives only a single e-mail and / or SMS. The disadvantage is that there is no notification when the server fails. However, this can be mitigated by checking the web interface regularly. This can be

covered more comfortable by the Windows program SMS management. For more information, refer to the documentation on the homepage.
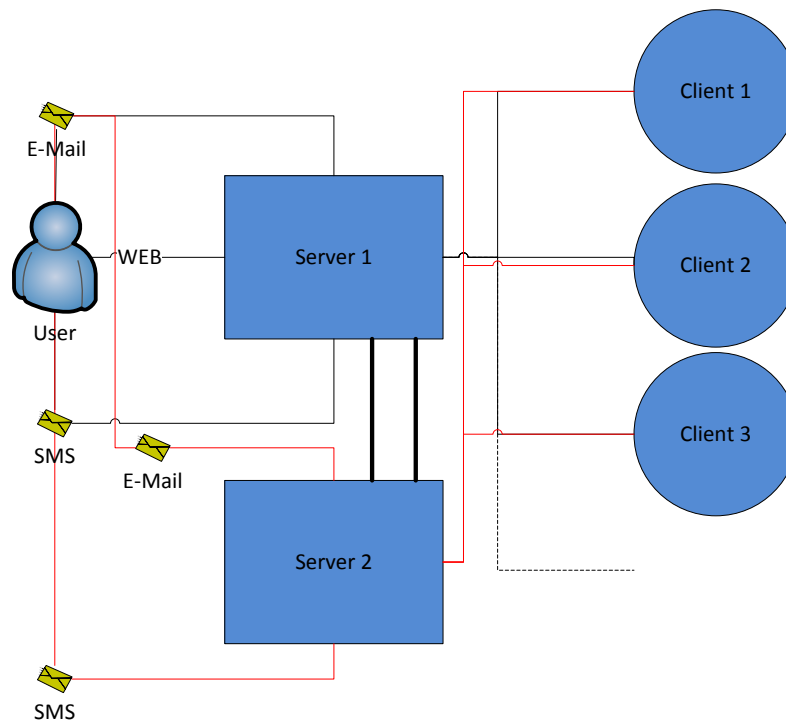
In the second variant several boxes can be defined as a server. If these are configured that they are not only monitoring the clients but also each other and send an e-mail and / or SMS, if they lose the connection to a box, then the user is informed about the failure and thus the disadvantage of the first variant is eliminated. However, the user is informed once per server on each event, that means if there are 5 server, the user also receives 5 emails. Therefore, the number of servers should be chosen as a compromise between the comfort and reliability.

3.2   Capture settings

The time of capture times determines how often the measurement values of snow load balance are queried. Send statistics is used to set whether you want to publish your data on the global statistics on www.elektrorauchheld.de anonymously. The additional configuration is performed under the connection settings. A transmitted record contains the name of the box (smshost0000), the actual weight, the entered country and zip code. Thus, no conclusions are possible to your system. We would be delighted if as many as possible attend this option to create an interesting and informative map on the snow load in Germany and in the world.

3.3 E-mail settings

The email settings are only visible if the box type is set to server or standalone. Up to three e-mail addresses can be specified to which alerts are sent. The remaining settings up to and including "SMTP Auth" must be set accordingly to your email provider.

With the drop-down box "send email at" can be determined, in which event (connection problem, prealert and alert level) an e-mail is sent. In all events the e-mail is sent once a day. If a more serious event occurs on the same day e.g. the user has already been warned about the prealert and then the alert level is also reached, then another e-mail is also sent to the user. The number of connection attempts before an alert is sent because of connection problems can also be adjusted. This parameter will also apply to the SMS settings.

The e-mail can be expanded with your own e-mail text and attachments. The attachments can be uploaded via the button . Using the context menu that appears when you right-click a file, files can also be deleted.

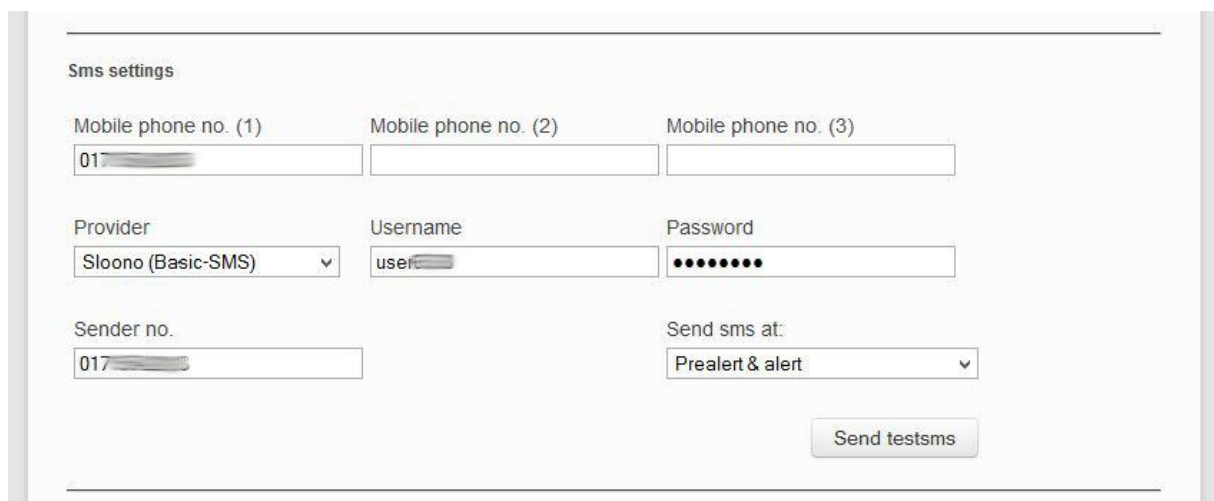With the button "Send Test Mail" the email settings can be checked.

3.4   SMS settings

The SMS settings are structured similarly to the e-mail settings. Again, there are three recipients to which an SMS will be sent. Currently there are 3 SMS providers to choose from, on which a SMS can be sent, so an Internet connection is also provided.

Currently, these are:

- http://www.sms-expert.de/
- http://www.sloono.de/
- http://www.mobilant.de

We recommend the provider SMS-Expert, but also the other two providers work fine. The respective provider can then choose between different tariffs, which differ in speed, Sender ID and worldwide shipping. For more information, see the respective website.

Notes:

- For SMS Expert the SMS gateway has to be activated in the customer center and assign a password. This password is to use at this point and NOT the login password.
- With Mobilant you must generate a Gateway Key in the customer center under Interfaces. This key is to use at this point and NOT the login password. The user name is left blank.

3.5 Connection settings

With the connection settings you can maintain those boxes that are monitored by the server and then sent a SMS or e-mail depending on the setting. If you have several boxes in use it is recommended to configure some of them as server and let them also monitor each other next to the clients. You should also choose a setting in which you will also be notified when a connection problem occurs to achieve a higher reliability. This is further increased by the use of SMS Management Windows program, which you can download from the website.

Connection settings

Name	Address	Location	Country	Zip code	
smshost0001	localhost	Here	de	5689	
smshost0008	192.168.1.11	First Lane 13	us	698771	Delete
smshost0002	snowload.no-ip.org:8888	Building 17	de	57368	Delete

Add

Save — Reset

Export — Durchsuchen... Keine Datei ausgewählt. Import

The connection settings are visible in standalone and server. New connections to other boxes can be established only on a server via the "Add" button.

The name must be entered in the format smshost0000. The network address must be entered only if no DHCP and DNS servers on the network is active. Otherwise, the name is used as a contact address. The location is an optional entry that describes where the scale is located. The fields "Country" and "Zip Code" are only visible when you have agreed that anonymous statistics can be published on elektrorauchheld.de. These two parameters indicate the approximate location of the snow load measuring system so that the presentation on an overview map is possible without any conclusion on you.

With a click on the "Save" button all settings the page are saved and the "Reset" button will accordingly reset all parameters to the default values.
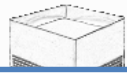
With a click on the button "Export" all page settings are exported and packaged in an encrypted file. You can upload this file to the same or another box using the file selection dialog. After clicking the "Import" button, the page refreshes and then you must sign in again to see the imported settings.

4 Statistic

After setup, you can see on the statistics page, the current values of your scale(s).

5 Update

The Update page can be accessed via the menu item "Contact" and the link "Update".

There you can see your current version, the version available on the internet and the related changelog. When a new version is available, you can initiate the update process via the button "Online Update". If the box is configured as the type server you can start this process for all connected boxes. The prerequisite for this is of course that each box has internet access. The manual update is intended for boxes that have special error or have no internet connection. For these cases, you can contact us via info@elektrorauchheld.de.

6 Appendix

6.1 LEDs

Optical indication of the network status is provided by the pure.box in the form of two LEDs integrated into the RJ45 jack. The device status is displayed by a multi-color indicator also on the front of the unit.

6.1.1 Network status

Two LEDs in the lower corners of the RJ45 jack indicate the current network status of the pure.box. The green LED may assume the following states:

- Off: No link
- On: Link present
- Flashing: Active data communication

The yellow LED indicates the current data rate:

- Off: 10MBit
- On: 100MBit

6.1.2 Multi-color indicator

The multi-color indicator on the front of the pure.box is used to represent the current system status

- Green: Normal state of the pure.box. All services are started and the system is fully ready. An underlaid cyclical flashing indicates the system load. The faster this flashes, the greater the process load.
- Blue: Booting. All services are being booted up. At this time no connections to the pure.box can be opened. When bootup is finished the LED changes shortly to red.
- Blue flashing: Network traffic to or from the pure.box.
- White pulsing: Ongoing firmware update
- Red flashing (approx. 1Hz): No link
- Red, solid on: Serious system error. The system can no longer be properly started.

6.2 Mechanical button

The mechanical button inegrated into the multi-color display can be used for manual triggering a hardware reset. When the button is held down the multi-color display changes from green to yellow to red. This process takes around 5 seconds. Then all connections are closed and the system is restarted.

After startup is complete the indicator comes on green again, including the underlaid pulsing which indicates the processor load.