DISCH

CE

DISCH Gateway IP

Congratulations on your new DISCH Gateway IP! The DISCH Gateway IP is a powerful open gateway for the EIB, offering great flexibility.

Due to its sophisticated technology, it is strongly advisable to read this product information as well as the documentation available on our homepage (`http://disch-systems.de`) before initial start-up of the DISCH Gateway IP. Please take into account the time necessary to thoroughly acquaint yourself with the information offered, before starting-up the DISCH Gateway IP.

Unauthorized opening of the device is not permitted and will void the warranty!

Functions of DISCH Gateways

The main functions of the DISCH Gateway are to ensure data transfer between EIB and various data systems as well as the visualization of an EIB.

The DISCH Gateway includes its own web server. This web server supports HTTP as well as WAP and offers a convenient and favorable way to visualize the EIB status.

In detail the visualization includes the following features:

- Markup languages HTML, XML and WML
- Implementation of CSS
- Server side script language PHP
- Timer/logic programming possible
- E-mailing and data base access
- Access control via `.htaccess`
- Client side script language JavaScript/JScript
- Client side visualization with Adobe Flash

Using a DISCH Gateway you can benefit from savings on hardware and software as well as on energy costs.

Additional software and updates for the DISCH Gateway are available for download from our web server using the gateway's download function. When buying an optional software license please indicate the serial number of your DISCH Gateway in order to receive the software activation code by e-mail.

Further you can find visualization examples with Flash, via WAP or for HTML with JavaScript on our homepage.

Application Instructions

The following application instructions must be strictly adhered to.

Do not use the DISCH Gateway IP in the immediate vicinity of large sources of electromagnetic disturbance, such as transformers, dimmers, inverters, motors, contactors, loudspeakers and electrical ballasts, as these can corrupt the data stored in the flash memory of the DISCH Gateway IP.

Further, please be sure to avoid permanent writing to the flash memory of the DISCH Gateway IP. The flash memory used has a life expectancy of 300,000 write accesses per sector. The number of read accesses is not limited.

Installation Information

If you need integration services for the installation and start-up of your DISCH Gateway please contact us directly. We can find you a corresponding partner.

Installation Process

For the installation of the gateway please perform the following steps in the order given.

The software available on the gateway is sufficient for installation and test run. The configuration mentioned herein refers to a point-to-point connection in local area network `192.168.1.`.

- Check the gateway power supply, especially the outer conductors (with the positive pole on top and the negative pole below).
- Establish connection between hub/switch and gateway with an Ethernet cable.
- Switch on hub/switch.
- Configure the setup computer (IP address: `192.168.1.100` and network mask: `255.255.255.0`). For this step it might be necessary to consult your network specialist!
- Start the setup computer with the configuration described.
- Now mount the gateway on the DIN rail.
- After the gateway is mounted on the rail and the network connection is established, the link LED (middle LED) lights up. At the same time the power LED (top LED) must light up and switch off after approx. 2 to 3 seconds. After the boot process is finished the power LED flashes regularly. The boot process takes approx. 1 minute.
- Now you can connect to the gateway via `http://192.168.1.101` using the web browser of the setup computer.

To ensure proper functioning of the gateway configuration interface JavaScript must be enabled in your browser!

- After approx. 10 seconds the gateway login page appears automatically. Please log in as user `administrator` with `disch` as password. After choosing the language you are forwarded to the menu page of your DISCH Gateway.
- Now select the `Network Configuration`; after approx. 30 seconds the page with the network setting appears. After this, you can enter the appropriate network settings for your installation. If necessary, please ask your system and network administrator for support during this step. Then click the `Save` button and `Restart` after the settings are saved.

After approx. 2 minutes the gateway is accessible under the new configuration, which you now have to enter into your web browser.

In more complex networks we recommend to additionally configure the standard router for network `192.168.1.`. In this case be sure to assign to the standard router address `192.168.1.200` on the interface for network `192.168.1.`. This is the default address expected by the DISCH Gateway for the standard router.

- You can open the `EIB Configuration` page to test the EIB access during start-up.
- The installation of optional software packages and necessary updates is performed via the `System Management` of the gateway, menu item "`Package from:`".
- The installation of your self-created visualization is also performed via the `System Management`. For this please choose menu item "`Copy visualization through:`". The visualization structure and its functions are described in the sample available on our homepage.

The PHP version currently used in the DISCH Gateway IP is version `4.4.4`. The PHP performance features are described in the PHP documentation and beyond our control. As web server an Apache version `1.3.6` is used.

Further details about the operation of the DISCH Gateway IP you can find in the help menu available on our homepage.

For enquiries about your DISCH Gateway please always have available the gateway serial number.

Gateway Reboot

For rebooting the gateway please take it off the DIN rail and re-mount it.

Do neither take the gateway off the DIN rail nor switch off the power supply during the installation of optional software, updating or copying your visualization. Non-compliance with this instruction can cause serious damage to the gateway!

Restore Default Settings

The described procedure changes the gateway configuration and should only be applied in the cases described.

It is easy to restore the default settings if you have forgotten the gateway password or if your settings impede access to the gateway via TCP/IP:

Inside the casing of the DISCH Gateway you can find a small opening marked with an arrow. In this opening a switch is located. When this switch is held down with a pointed object, e.g. with an unwound paper clip, for 30 seconds, the gateway is reset to the default settings and rebooted. Depending on the software installed on your gateway, this process can take up to 5 minutes. In response to the switch being held down, the gateway power LED starts flashing fast.

After the DISCH Gateway is reset to default settings, it can be accessed via your web browser using the following parameters:

IP address:	`192.168.1.101`
Network mask:	`255.255.255.0`
Standard router:	`192.168.1.200`
User:	`administrator`
Password:	`disch`

The settings already defined for the various users in the user administration (except for the user `administrator`) as well as your self-created visualization will be preserved.

Precautionary Measures

The applicable safety and accident prevention regulations must be observed.

If your DISCH Gateway is defective, please return it to us in the original packing, considering our return guidelines and providing a detailed fault description. Please preliminarily co-ordinate the return with us.

Technical Data

The DISCH Gateway IP is connected to the Ethernet using a cable with RJ45 plug. The data transfer rate is 10 MBit/s.

The DISCH Gateway is connected to the EIB via data rail. For this, the DISCH Gateway is mounted on a DIN rail equipped with a data rail glued into it.

The DISCH Gateway requires both of the inner contacts for data transfer to the EIB. The two outer poles (+/-) are used for power supply.

Power supply:	`10 V to 34 V`
Allowable power interruption time:	`typically 100 ms`
Power input current:	`typically 140 mA at 29 V` `typically 400 mA at 10 V`
EIB input current:	`typically 5 mA`
Power consumption:	`typically 4 W`
Clock power reserve:	`typically 4 h`
Ambient conditions:	`class K5H`
Operating temperature:	`-5 °C to +45 °C`
Degree of protection:	`IP 20`
Protection class:	`III`
Dimensions (width x height x depth):	`105 mm x 90 mm x 55 mm`
Device width:	`6 width units = 105 mm`

Every DISCH Gateway is equipped with a watchdog to ensure maximum operating safety.

CE Marking

In accordance with EMC directive (residential and functional buildings), low voltage directive (safety extra low voltage).

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