

# Expert Power Control 1100/1101





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# 1 Safety Advice

The device must be installed only by qualified personnel according to the following installation and operating instructions. The manufacturer does not accept responsibility in case of improper use of the device and particularly any use of equipment that may cause personal injury or material damage.

The device contains no user-maintenable parts. All maintenance has to be performed by factorytrained service personnel.

Check if the power cord, the plug and the socket are in proper condition.

The device can be connected only to 230V AC (50 or 60 Hz) sockets.

Always connect the device to properly grounded power sockets.

The device is intended for indoor use only. Do NOT install them in an area where excessive moisture or heat is present.

Because of safety and approval issues it is not allowed to modify the device without our permission.

Please note the safety advises and manuals of connected devices, too.

The device is NOT a toy. It has to be used or stored out of range of children.

Packaging material is NOT a toy. Plastics has to be stored out of range of children. Please recycle the packaging materials.

In case of further questions, about installation, operation or usage of the device, which are not clear after reading the manual, please do not hesitate to ask our support team.

Please, never leave connected equipment unattended, that can cause damage (e.g. iron heater, etc.).

# 2 Description

The **Expert Power Control 1100/1101** facilitates the remote switching of electrical devices via a TCP/IP network. For installation, the device is simply connected to a power supply and to the local network.

Operation and configuration are made by a webinterface. Additionally, the device can be switched directly buttons at the housing, via SNMP or http commands, integrated in customer made applications.

An energy meter displays the energy consumption of the connected device and a lot of other electrical information. These informations are displayed via webinterface and SNMP.

A temperature sensor or a hybrid sensor (temperature and humidity) can be connected to the **Expert Power Control 1100/1101**.

A watchdog function for each power port is implemented.

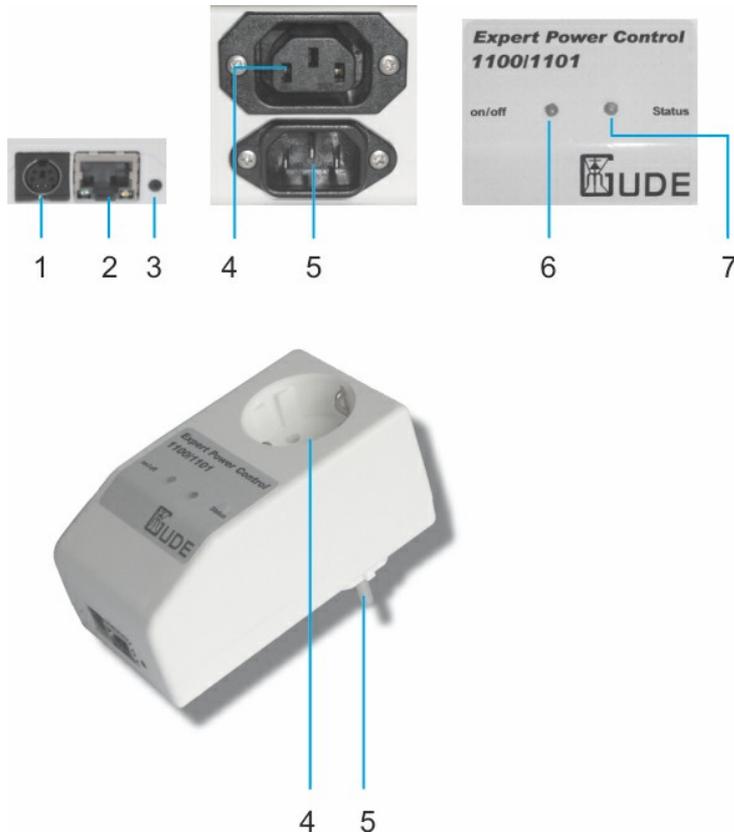
# 3 Hardware

## 3.1 Content of delivery

Included in delivery are:

- **Expert Power Control 1100/1101**
- Power supply cable , if **Expert Power Control 1101**
- Quick installation guide

### 3.2 Connections



- 1) mini DIN socket for Sensor
- 2) Ethernet (RJ45)
- 3) Button
- 4) Power Port (EPC 1100 CEE 7/4, max 16A/ EPC 1101 IEC C19 max.10A)
- 5) Power Supply (EPC 1100 CEE 7/4, 230 VAC, max.16A/ EPC 1101 IEC C20 max.10A)
- 6) Power Port LED
- 7) Status LED

### 3.3 Installation

- 1.) Connect the AC power connector on the back of the Expert Power Control 1100/1101 with a power outlet, or plug the device into an outlet. The machine starts and is ready for operation after a short moment. The LEDs should be lit.
- 2) Plug the network cable into the Ethernet port on the front of the unit and connect it to your network.
- 3) Connect the load to the Power Port.

### 3.4 Status LED

The Status LED shows different states of the device:

- Status LED red: Device is not connected to the Ethernet
- Status LED orange: Device is connected to the Ethernet, TCP/IP settings are not allocated
- Status LED green: Device is connected to the Ethernet, TCP/IP settings allocated, device is ready to use
- Status LED blinks alternately red and green: Device is in Bootloader mode.

## 4 Configuration

### 4.1 DHCP

After switch-on **Expert Power Control 1100/1101** looks for a DHCP server and requests an available IP address .

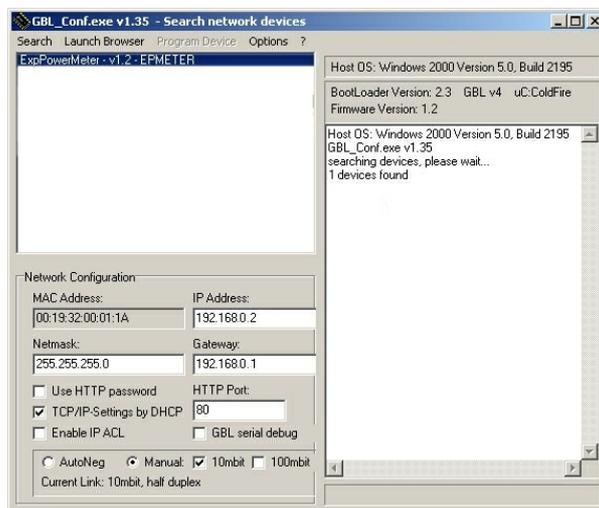
Please check the IP address allocated to **Expert Power Control 1100/1101** in the DHCP server settings to make sure that the same address is used at every reboot.

### 4.2 Network settings with GBL\_Conf

For changing the network properties manually, the program *GBL\_Conf.exe* is required. This tool is available for free on our website [www.gude.info](http://www.gude.info).

Furthermore *GBL\_Conf.exe* enables you to install firmware updates and to reset **Expert Power Control 1100/1101** to its factory settings.

Activate bootloader mode of **Expert Power Control 1100/1101** and run *GBL\_Conf.exe*. The program will look automatically for connected devices and will display their network configuration.



If the displayed IP address accords with the factory settings (192.168.0.2), there is either no DHCP server available in the network or no free IP address could be allocated.

Enter a free IP address and the according netmask in the entry mask, then save these changes by clicking on *Program Device* gSaveConfig.

Restart the firmware of **Expert Power Control 1100/1101**, so that the changes will take effect. Now click on *Search* in order to have the new network configuration displayed.

## 4.3 Configuration via webinterface

Go to the website of **Expert Power Control 1100/1101**. Enter the IP address of **Expert Power Control 1100/1101** into the address line of your internet browser:

*http://IP address of Expert Power Control 1100/1101/*  
and press LOGIN.

To enter the configuration menu, click on „Configuration“ on the upper left side of the screen.

### 4.3.1 Configuration - Power Ports

Control Panel Configuration Logout

[Powerports](#) · [IP Address](#) · [IP ACL](#) · [HTTP](#) · [SNMP](#) · [Syslog](#) · [E-Mail](#)

#### Configuration - Powerports

- Choose Powerport to configure: Power Port 1
- Label: Power Port 1
- Initialization status:  on  off  Remember last state
- Initialization delay: 0
- Repower delay: 0
- Reset duration: 10

---

- Enable watchdog:  yes  no
  - Watchdog Type:  ICMP  TCP
  - Watchdog Action:  Reset  Off
  - Hostname:
  - TCP Port: 80
  - Ping Interval: 10
  - Ping Retries: 6

Apply

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#### 4.3.1.1 Label

A name with a maximum of 15 characters can be entered here for each Power Port.

#### 4.3.1.2 Initialization Status

Here can be the status of the Power Ports defined, that should be attained after the device has been turned on (*remember last state, on, off*).

#### 4.3.1.3 Initialization Delay

When the Power Port Initialization is executed after powering up of the device, a delay in the Initialization sequence can be specified. This will prevent to turn on too much load at the same time. The delay can last up to 8191 seconds. This corresponds to about two hours and 20 minutes.

#### 4.3.1.4 Repower Delay

When this feature is enabled (value greater than zero), the power port will turn itself on after the specified time. This happens after the power port was turned off via webinterface, SNMP or serial interface.

#### 4.3.1.5 Reset Duration

If the Reset button in the switching menu is triggered, the device will turn of the specified Power Port, wait the time entered here (in seconds) and then it will turn on the power port again.

#### 4.3.2 Watchdog

While using the watchdog, electrical devices can be observed. The watchdog sends ICMP-pings or TCP-pings to the device. If these pings were not answered, during a defined delay (time or pings), the power port will reset. The watchdog function allows to restart e.g. crashed servers or NAS systems.

You can check the watchdog function and other information inside of the switching menu. There are different colors:

Green text: Watchdog is active and receives ping replies

Orange text: Watchdog is activating at the moment, waiting for first ping reply

Red text: Watchdog is active and does not receive ping replies any longer

When watchdog is activating it waits of a first ping reply. During this time, the information is written as an orange text. After the receive of the first ping reply, it switches to active, written in green letters.

When a watchdog reset a power port, the watchdog again waits for a first ping reply, as stated above.

##### 4.3.2.1 Enable Watchdog

Here you can activate the watchdog for this power port.

##### 4.3.2.2 Watchdog type

Here you can switch between ICMP ping or TCP ping.

##### 4.3.2.3 Host IP

Here you can enter the IP address this watchdog should observe.

##### 4.3.2.4 TCP Port

If TCP pings are used, here you can enter the TCP port. A TCP port is not needed, when ICMP pings are choosen.

##### 4.3.2.5 Ping interval

Here you can enter the time between two pings.

##### 4.3.2.6 Ping retry

Here you can enter how often the ping should be repeated, before a power port reset will be done.

### 4.3.3 Configuration - IP Address

The screenshot shows the 'Configuration - IP Address' page in the Expert Power Control 1100/1101 web interface. At the top, there are navigation tabs for 'Control Panel', 'Configuration', and 'Logout'. Below these, a breadcrumb trail reads 'Powerports · IP Address · IP ACL · HTTP · SNMP · Syslog · E-Mail'. The main content area is titled 'Configuration - IP Address' and contains the following fields:

- Hostname: EPC-NET-1x
- IP Address: 192.168.1.244
- Netmask: 255.255.255.0
- Gateway Address: 192.168.1.3
- DNS Address: 192.168.1.5
- Use DHCP:  yes  no

An 'Apply' button is located at the bottom of the configuration area.

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#### 4.3.3.1 Hostname

Enter the host name of **Expert Power Control 1100/1101**. **Expert Power Control 1100/1101** uses this name to connect with DHCP server.

**Special signs may destabilize your network.**

**All changes need a restart of the firmware to get valid.**

#### 4.3.3.2 IP Address

Here you can change the IP address of **Expert Power Control 1100/1101**.

**All changes need a restart of the firmware to get valid.**

#### 4.3.3.3 Netmask

Here you can change the netmask of **Expert Power Control 1100/1101**.

**All changes need a restart of the firmware to get valid.**

#### 4.3.3.4 Gateway

Here you can change the standard gateway of **Expert Power Control 1100/1101**.

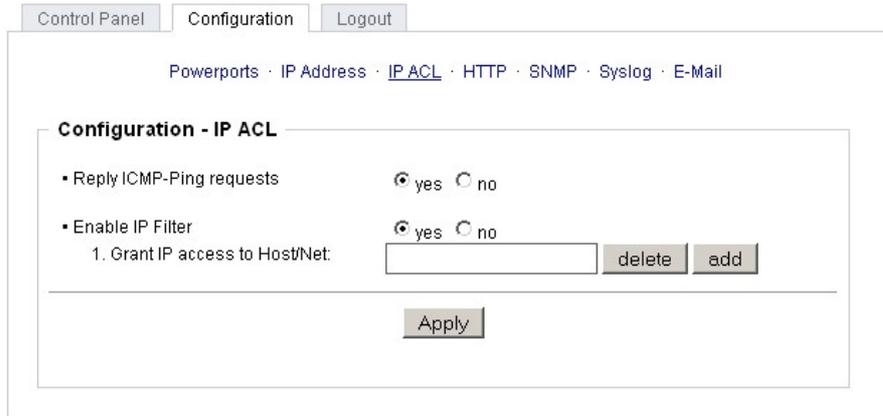
**All changes need a restart of the firmware to get valid.**

#### 4.3.3.5 Use DHCP

Here you can set, if **Expert Power Control 1100/1101** shall get its TCP/IP settings directly from your DHCP server. If DHCP is activated, **Expert Power Control 1100/1101** proves if a DHCP server is active inside of your LAN. Then **Expert Power Control 1100/1101** requests TCP/IP settings from this server. If there is no DHCP server inside of your network, we recommend to deactivate this function.

**All changes need a restart of the firmware to get valid.**

### 4.3.4 Configuration - IP ACL



Expert Power Control 1100 - v2.0.0

IP Access Control List (IP ACL) acts as an IP filter for your **Expert Power Control 1100/1101**. Whether it is active hosts and subnets only can contact **Expert Power Control 1100/1101**, if their IP addresses are stated in this IP ACL.

e.g.: „<http://192.168.0.1>“ or „<http://192.168.0.1/24>“

If you locked yourself out by mistake, please activate the bootloader mode of **Expert Power Control 1100/1101**, start *Gbl\_Conf.exe* and deactivate IP ACL.

You can find more information about configuration of IP ACL or have a look at <http://www.gude.info/wiki>.

#### 4.3.4.1 Reply ICMP-Ping requests

Here you can set, if **Expert Power Control 1100/1101** shell react on pings.

#### 4.3.4.2 Enable IP Filter

Here you can activate the IP Access Control List (IP ACL) of **Expert Power Control 1100/1101**.

**If IP ACL is active, DHCP and SNMP only work, if all necessary servers and clients are registered in this list.**

#### 4.3.4.3 IP Access Control List

The IP Access Control List (IP ACL) is an IP filter for the Expert Power Control 1100/1101. If the filter is active, only those hosts and subnets whose IP addresses are entered in the list, can contact the device to change settings or switch the ports.

Example:

Entry in the IP ACL	Operation
192.168.0.123	a PC with IP Address „192.168.0.123“ can access to the device
192.168.0.1/24	all Devices in the Subnet „192.168.0.1/24“ can access

Sollten Sie sich hier aus Versehen „ausgesperrt“ haben, aktivieren Sie den Bootloader-Modus des **Expert Power Control 1100/1101** und deaktivieren Sie mit Hilfe der *Gbl\_Conf.exe* die IP ACL.

You find possible adjustments of the IP ACL in the chapter "Configuration - IP ACL".

### 4.3.5 Configuration - HTTP

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#### 4.3.5.1 HTTP Port

Here you can enter the HTTP port number, if necessary. Possible numbers are 1 ... 65534 (standard: 80). To get access to **Expert Power Control 1100/1101**, you have to enter the port number behind the IP address of **Expert Power Control 1100/1101**, e.g.: `http://192.168.0.2:1720`

**All changes need a restart of the firmware to get valid.**

#### 4.3.5.2 Enable HTML Auto Refresh

You can activate and de-activate the auto-refresh of the web interface. The auto-refresh keeps the information of the status page up to date, but the additional network traffic can be unwanted.

#### 4.3.5.3 Require HTTP Password

Password protected access can be activated here. In this case, a user and an admin password have to be defined. Passwords have a maximum lengths of 15 characters.

Administrators are authorized to switch all ports and to modify the settings of **Expert Power Control 1100/1101** and of all ports. The username of the admin is "admin".

Users are authorized to switch all ports but are not allowed to modify the settings of neither **Expert Power Control 1100/1101** nor the ports. The username of the user is "user".

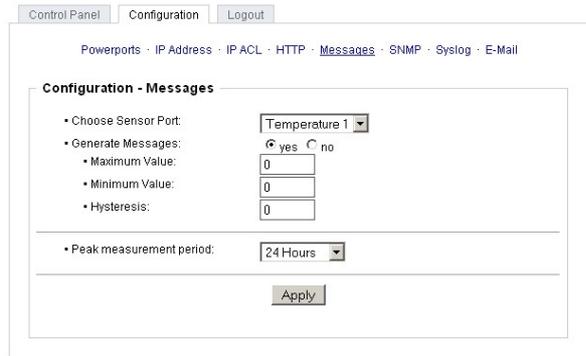
If you have forgotten your password, activate the bootloader mode of **Expert Power Control 1100/1101**, start GBL-Conf.exe and deactivate the password request.

**All changes need a restart of the firmware to get valid.**

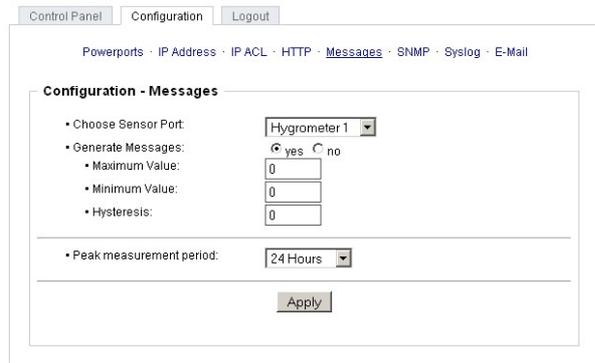
#### 4.3.5.4 Check Password on start page

If activated, the user has to enter his password, before logging in to the webinterface.

### 4.3.6 Configuration - Messages



Expert Power Control 1100 - v2.0.0



Expert Power Control 1100 - v2.0.0

#### 4.3.6.1 Peak measurement period

Here you can set how long the peak values of the sensors and the current measurement should be recorded.

#### 4.3.6.2 Generate Messages

This entries control the threshold values (Min- Max values) at which alerts are send via SNMP traps, Syslog and email.

#### 4.3.6.3 Hysteresis

A Hysteresis value prevents that too much messages are generated, when a sensor value is jittering around a sensor limit. The following example shows the behaviour for a temperature sensor and a hysteresis value of "1". An upper limit of "50" is set.

Example:

49.9°C - is below the upper limit

50.0°C - a message is generated for reaching the upper limit

50.1°C - is above the upper limit

...

49.1°C - is below the upper limit, but in the hysteresis range

49.0°C - is below the upper limit, but in the hysteresis range

48.9°C - a message is generated for crossing the upper limit inclusive hysteresis range

49.0°C - is below the upper limit

...

49.9°C - is below the upper limit

50.0°C - a message is generated for reaching the upper limit

### 4.3.7 Configuration - SNMP

The screenshot shows the 'Configuration - SNMP' page. At the top, there are navigation tabs: 'Control Panel', 'Configuration', and 'Logout'. Below the tabs is a breadcrumb trail: 'Powerports · IP Address · IP ACL · HTTP · SNMP · Syslog · E-Mail'. The main content area is titled 'Configuration - SNMP' and contains the following settings:

- Enable SNMP options:  SNMP-get  SNMP-set
- Community public:
- Community private:
- SNMP traps:  send SNMP traps
  - SNMP trap version:  SNMP v1  SNMP v2c
  - SNMP trap receiver 1:

At the bottom of the configuration area is an 'Apply' button. Below the configuration area is a link for 'MIB Table'.

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#### 4.3.7.1 Enable SNMP-get

Here you can activate SNMP-get protocol of the **Expert Power Control 1100/1101**.

#### 4.3.7.2 Community public

Here you can enter the SNMP public community.

#### 4.3.7.3 Enable SNMP-set

Here you can activate SNMP-set protocol of the **Expert Power Control 1100/1101**.

#### 4.3.7.4 Community private

Here you can enter the SNMP private community.

#### 4.3.7.5 Download SNMP MIB

Here you can download the **Expert Power Control 1100/1101 MIB table**.

#### 4.3.7.6 Enable Traps

Here you can activate SNMP-traps. if enabled, the **Expert Power Control 1100/1101** will dispatch SNMP-traps to all receivers listed.

#### 4.3.7.7 Trap Version

Here you can choose between SNMP-traps standard v1 and v2c.

More information about the SNMP functions of the **Expert Power Control 1100/1101**, you can find in chapter SNMP, on <http://www.gude.info/wiki> or ask our support team.

### 4.3.7.8 SNMP Trap receiver

In these fields you can enter up to 8 trap receiver. A new line appears when you press the "add" button. Receiver addresses have to be listed as follows: IP address (and, if necessary the HTTP port), e.g.: 192.168.0.2:8000.

### 4.3.7.9 SNMP

To get detailed status information of **Expert Power Control 1100/1101** SNMP can be used. SNMP communicates via UDP (port 161) with **Expert Power Control 1100/1101**: You can use SNMP to switch the power ports as well.

Supported SNMP commands:

- SNMPGET: request status information
- SNMPGETNEXT: request the next status information
- SNMPSET: **Expert Power Control 1100/1101** request change of status

You will need a Network Management System, e.g. HP-Open View, OpenNMS, Nagios etc., or the command line tools of NET-SNMP to request information of **Expert Power Control 1100/1101** via SNMP.

#### 4.3.7.9.1 SNMP-communities

SNMP authenticates requests by so called communities.

The public community has to be added to SNMP-read-requests and the private community to SNMP write requests. You can see the SNMP communities like read/write passwords. SNMP v1 and v2 transmit the communities without encryption. Therefore it is simple to spy out these communities. We recommend to use a DMZ or IP ACL.

#### 4.3.7.9.2 MIB

All information, that can be requested or changed, the so called „Managed Objects“, are described in „Management Information Bases“ (MIBs).

There are three MIBs, which can be requested from the **Expert Power Control 1100/1101**:

„system“, „interface“ and „powerports“

„system“ and „interface“ are standardised MIBs (MIB-II).

„powerports“ (GUDEADS-EPC-MIB::gadsEPC) was created especially for the **Expert Power Control 1100/1101**.

At least, there are so called Object Identifiers (OID) subordinated to those three structures. An OID describes the location of an information inside a MIB.

#### 4.3.7.9.3 SNMP-traps

SNMP-Traps are system messages, sent via SNMP-protocol to different clients. On following events, **Expert Power Control 1100/1101** will dispatch a SNMP-Trap:

- Switching of the Power Ports
- Min/Max-Alerts from the sensors

You can find more information about configuration of SNMP at <http://www.gude.info/wiki>.

## 4.3.8 Configuration - Syslog

Control Panel
Configuration
Logout

Powerports
IP Address
IP ACL
HTTP
SNMP
Syslog
E-Mail

**Configuration - Syslog**

- Enable syslog:  yes  no
- Syslog server:

Syslog messages are simple text messages transmitted to a syslog server using UDP. Linux OS regularly have a syslog daemon installed, e.g. syslog-ng. For Windows there are some freeware tools available. On following events, **Expert Power Control 1100/1101** will send a syslog message:

- Booting up
- Activation/deactivation of syslog
- Switching of Power Ports

You can find more information about configuration of Syslog in chapter Configuration - Syslog or have a look at <http://www.gude.info/wiki>.

#### 4.3.8.1 Enable Syslog

Here you can activate Syslog of **Expert Power Control 1100/1101**.

#### 4.3.8.2 Syslog Server IP

If syslog is active enter here the IP address of you Syslog server.

#### 4.3.8.3 Syslog Port

If syslog is active enter here the port number, that your Syslog server uses to receive syslog information.

More information about Syslog you can find in chapter Syslog, on <http://www.gude.info/wiki> or ask our support team.

### 4.3.9 Configuration - E-Mail

Control Panel Configuration Logout

Outputs · IP Address · IP ACL · HTTP · Messages · SNMP · Syslog · E-Mail

**Configuration - E-Mail**

• Enable E-Mail:  yes  no

• E-Mail Server:

• Sender address:

• Recipient address:

• Enable Authentication:  yes  no

• Username:

• set new password:

• repeat password:

Apply

#### 4.3.9.1 Enable E-Mail

Here you can activate the e-mail function of the device.

#### 4.3.9.2 E-Mail server

Enter the e-mail server, e.g. mail@gmx.net

#### 4.3.9.3 Sender address

Enter the address, the device should use, when sending e-mails.

#### 4.3.9.4 Recipient address

Enter the e-mail address of the recipient.

### 4.3.9.5 Enable Authentifiaction

If your e-mail server needs an authentication, you can enter it here.

### 4.3.9.6 Username

Enter the username, the device should use to log on your e-mail server.

### 4.3.9.7 Set new password

If your server needs a password for sending e-mails, you can enter it here.

### 4.3.9.8 Repeat password

Repeat the password, to enable it.

## 5 Operation

### 5.1 Switching at the device

To switch the Power Port press the button right of the RJ45 socket for 2 seconds.

You can see the state of the Power Port from the color of the (on/off) LED at the front (green = on / red = off).

### 5.2 Switching by Webinterface

Go to the website of **Expert Power Control 1100/1101**. Enter the IP address of **Expert Power Control 1100/1101** into the address line of your internet browser:

*http://IP address of Expert Power Control 1100/1101/* and press LOGIN

#### 5.2.1 Control Panel

The screenshot shows a web interface with tabs for 'Control Panel', 'Configuration', and 'Logout'. The main area displays 'Power Port 1' with a green 'ON' indicator and buttons for 'On', 'Off', 'Reset', and 'Batchmode'. Below this is a table with energy measurement data.

Line Id	Name	Voltage		Current		Freq		Power				total Energy		relative Energy		
		AC rms V	AC rms A	AC rms A	Hz	phase °	active W	reactive VAR	apparent VA	PF	active kWh	abs. reactive kVARh	active kWh	abs. reactive kVARh	time h:m:s	
L1	Power Port 1	224,6	0,230	49,979	-36,2	31,0	-11,0	51,0	0,61	4,132	4,832	0,010	0,003	00:19:36	reset	

show details  
auto logout in 296s  
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In the Control Panel, you can turn on the power port directly. The exact switching functions are subsequently described.

The Control Panel also shows the Energy Measurement values and if the sensor is connected. There you can reset the Relative Energy counter when you press the *reset* button. The Total energy meter will show its values counting from the first start.

The Min / Max values of the sensors can also be reset via the "Reset min/max" button.

### 5.2.1.1 Reset

By using this function, the port will be switched off. Ten seconds later, the port will switch on again, automatically.

### 5.2.1.2 Batchmode

The Power Port of the **Expert Power Control 1100/1101** can be switched on or switched off for a selectable delay (1-30 sec. or 1-30 min.). After the chosen delay the selected port will be switched off or switched on again automatically.

## 5.3 Sensor

Connect the temperature sensor with the sensor connector at the front of the device. If it is connected exactly, the recent temperature is displayed in the login window, in the switching window and can be requested via SNMP. The temperature sensor can be ordered as additional supplies. More information can be found at [www.gude.info](http://www.gude.info) or requested at [mail@gude.info](mailto:mail@gude.info).



Temperature sensor 7001



Hybrid sensor 7002

Temperature sensor 7001	
Cable length	~ 2m
Connection	MiniDIN
Measurement	-20°C - +100°C ±2°C (max) and ±1°C (typical)

Hybrid sensor 7002	
Cable length	~ 2m
Connection	MiniDIN
Measurement	-20 - +80 Grad, ± 0,5°C / Moisture 0-100% ±3%

## 5.4 Energy Measurement

Electrical Measurement Specification				
Category	Range	Unit	Resolution	Inaccuracy (typical)
Voltage	110-265	V	0.01	< 1%
Current	0,1 - 16	A	0.001	< 1.5%
Frequency	45-65	Hz	0.01	< 0.03%
Phase	-180 - +180	°	0.1	< 1%
Active power	1 - 4000	W	1	< 1.5%
Reactive power	1 - 4000	Var	1	< 1.5%
Apparent power	1 - 4000	VA	1	< 1.5%
Powerfactor	0 - 1	-	0.01	< 3%
Energy Counter				
Active Energy (total)	9.999.999,999	kWh	0.001	< 3%
Active Energy (temporary)	9.999.999,999	kWh	0.001	< 3%

## 6 Features

### 6.1 Bootloader mode

To activate the bootloader mode of **Expert Power Control 1100/1101** the button must be pushed while restarting the device. In bootloader mode it is possible to disable the password protection, to update the firmware and to restore the default settings by running the program *GBL\_Conf.exe*.

If the device runs already, press the buttons "select" and "ok" for three seconds. The bootloader mode of **Expert Power Control 1100/1101** is indicated by "BOOT-LDR" appended to the device name in the program window of *GBL\_Conf.exe*.

During bootloader mode an alteration of the relays is not possible.

To restart the firmware, without toggle the Power Ports, press the buttons *select* and *ok* for three seconds again.

### 6.2 Firmware update

In order to update the firmware the program *GBL\_Conf.exe* and the latest firmware are needed.

Start the device in bootloader mode and run the program *GBL\_Conf.exe*. On the left side of the program window all Gude devices that are in the network are listed. Select the device, that should be updated, click on Program DeviceFirmware Update and determine the location of the new firmware.

Please note: The up-to-date firmware and *GBL\_Conf.exe* can be found at [www.gude.info](http://www.gude.info), free to download.

## 6.3 Technical information

Connections:	1 x Ethernet (RJ45) <b>Power Port:</b> 1 x CEE 7/4, 230 VAC, max. 16A <b>(1100)</b> or 1 x IEC C13, 230 VAC, max. 10A <b>(1101)</b> <b>Power supply inlet:</b> 1 x CEE 7/4, 230 VAC, max. 16A <b>(1100)</b> or 1 x IEC C14, 230 VAC, max. 10A <b>(1101)</b> 1 x Sensor Connector (mini DIN)
Network:	10/100 MBit/s 10baseT Ethernet
Protocols:	TCP/IP, HTTP, SNMP v1 and v2c, SNMP traps, Syslog, E-Mail
Switched Power (total):	10 A (~ 2000W) <b>(1101)</b> 16 A (~3000W) <b>(1100)</b>
Switched Power (per port):	10 A (~ 2000W) <b>(1101)</b> 16 A (~3000W) <b>(1100)</b>
Operating temperature:	0°C-50°C
Dimensions:	120 mm x 95 mm x 65 mm (L x H x W)
Weight:	ca.300g

## 6.4 Factory settings

In order to restore the default settings the device must be started in bootloader mode. Besides that the program *GBL\_Conf.exe* is required.

Run *GBL\_Conf.exe* and select the device whose settings should be restored. Then click on *Program Device -> Reset to Fab default*.

Please notice that all current settings will be deleted. The default settings will be loaded when the firmware of the device is restarted the next time.

## 7 Support

In case of further questions, about installation or operation of the device, please have look at [www.gude.info/wiki](http://www.gude.info/wiki) or do not hesitate to contact our support ([mail@gude.info](mailto:mail@gude.info)).

## 8 Contact

Gude Analog- und Digitalsysteme GmbH  
Eintrachtstraße 113  
50668 Cologne  
Germany

Phone: +49-221-912 90 97  
Fax: +49-221-912 90 98  
E-Mail: [mail@gude.info](mailto:mail@gude.info)  
Internet: [www.gude.info](http://www.gude.info)

Managing Director: Dr.-Ing. Michael Gude

District Court: Köln, HRB-Nr. 17 7 84  
WEEE-number: DE 58173350  
Value added tax identification number (VAT): DE 122778228

## 9 Declarations of conformity

### CE Konformitätserklärung / Declaration of Conformity

Die Firma / The manufacturer

Gude Analog- und Digitalsysteme GmbH

**Anschrift/Address:** Eintrachtstr. 113, 50668 Köln (Deutschland)  
**Telefon/Phone:** +49 (0)221 – 912 90 97  
**Fax:** +49 (0)221 – 912 90 98  
**Web:** www.gude.info  
**Mail:** mail@gude.info

erklärt hiermit, dass die Produkte / hereby declares that the following products

**Produktkennzeichnung / Product name**

**Expert Power Control 1100/1101**

Schaltbare Ein- bzw. Mehrfach-Steckdose für TCP/IP Netzwerke / Switchable single and multiple socket for TCP/IP networks

mit den Bestimmungen der nachstehenden EU-Richtlinien übereinstimmen /  
 are in accordance with the following european directives

Referenz-Nummer / Reference no.	Titel / Title
89/336/EWG / 89/336/EEC	Elektromagnetische Verträglichkeit / Electromagnetic Compatibility
2006/95/EWG / 2006/95/EEC	Niederspannungsrichtlinie / Low Voltage Electrical Equipment
93/68/EWG / 93/68/EEC	CE Kennzeichnung / CE marking

und dass die nachstehenden Europäischen Normen zur Anwendung gelangt sind. /  
 and comply with the following european standards.

Norm / Standard	Titel / Title
EN 55022:2006 + A1, A2	Einrichtungen der Informationstechnik: Funkstöreigenschaften – Grenzwerte und Messverfahren
EN 55022:2006 + A1, A2	Information technology equipment: Radio disturbance characteristics - Limits and methods of measurement
EN 55024:1998 + A1, A2	Einrichtungen der Informationstechnik: Störfestigkeitseigenschaften – Grenzwerte und Prüfverfahren
EN 55024:1998 + A1, A2	Information technology equipment: Immunity characteristics - Limits and methods of measurement
EN 61000-3-2:2006	Elektromagnetische Verträglichkeit Teil 3-2: Grenzwerte - Grenzwerte für Oberschwingungsströme
EN 61000-3-2:2006	Electromagnetic compatibility Part 3-2 : Limits – Limits for harmonic current emissions
EN 60950-1:2006	Sicherheit von Einrichtungen der Informationstechnik
EN 60950-1:2006	Safety for Industrial Control Equipment

Köln, 04.08.2011



Dr. Michael Gude, Geschäftsführer / CEO

Der Hersteller/  
The manufacturer



**Gude Analog- und Digitalsysteme GmbH**  
Eintrachtstrasse 113  
50668 Köln

erklärt hiermit, dass für folgende Produkte/  
hereby declares that the following products:

**Expert mouseClock** (alle Varianten/all versions)  
**EMC Professional NET** (alle Varianten/all versions)  
**Expert GPS Clock** (alle Varianten/all versions)  
**Expert Power Control NET** (alle Varianten/all versions)  
**Expert Power Meter** (alle Varianten/all versions)  
**Expert OptoBridge**  
**USB-RS232 OptoBridge**  
**Expert ISDN Control** (alle Varianten/all versions)  
**Aktive Antennen / Active Antennas**

mit den Bestimmungen der nachstehenden Richtlinien übereinstimmen/  
are in accordance with the following directives:

**2002/95/EG** (RoHS - Restriction of certain Hazardous Substances)  
**2002/96/EG** (WEEE - Waste Electrical and Electronic Equipment)  
**ElektroG** (Elektro- und Elektronikgerätegesetz)

Köln, 07.05.2009

Dr. Michael Gude, Geschäftsführer / CEO



Eintrachtstr. 113, 50668 Köln  
Tel.: 0221 / 912 90 97  
Fax: 0221 / 912 90 98  
www.gude.info - info@gude.info

