



Overview

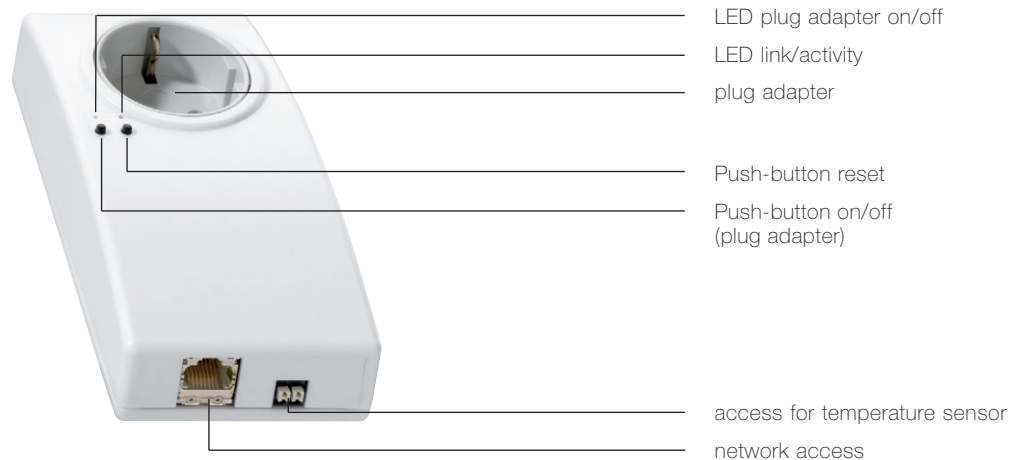


Figure 1

Scope of Delivery

- TC IP 1
- Operating instructions

Accessory (optional)

[700 902 610](#) Temperature sensor [700 802 201](#)

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General

The TC IP 1 allows the switching of electrical devices via the TCP/IP-network. The device is located in a plug-plug adapter housing. To put into operation the TC IP 1 simply has to be connected to a power outlet and the respective network.

The device to be switched will be plugged into the provided power outlet of the TC IP 1. The TC IP 1 can be switched from all computers of the same network with their web browser by IP-address 192.168.0.2.

The TC IP 1 can also be operated from the Internet if certain preconditions are fulfilled.

A local operation is possible with a push-button on the device.

The actual switching state of the output is indicated by a LED at the push-button for switching.

With a web browser it is possible to display the actual temperature at connected temperature sensor (optional, article number: 700 802 201) as well as the settings of the network characteristics and the time switch.

The necessary time required for the switching-functions will be automatically updated hourly with the Simple Network Time Protocol (SNTP) from the server [europe.pool.ntp.org](#), if the server is available.

System Requirements

The homepage has been optimised for the Internet Explorer 8. JavaScript must be activated at your browser. You can choose between two languages in the headline, in addition, that the status, the system time and the temperature (at connected temperature sensor) will be displayed.

Configuration

System Settings without DHCP-Server

1. Connect the TC IP 1 with a patch cord (separately deliverable) to the local network.
2. Connect the temperature sensor (optional) at the spring terminals.
3. Push the TC IP 1 in a plug.
4. The TC IP 1 can be reached with a browser entering the address <http://192.168.0.2> or <http://TCIP1>.
5. With the button „network configuration“ in the main menu (arrow, figure 2) you will access the system settings of TC IP 1 (figure 3).
6. In order to call up the TC IP1 directly, choose under “Network name” an individual name.
7. Modify the IP-address of the TC IP 1 according to your own needs.
8. Increase the access protection of your network connection through an individual user name and password. Once a password has been chosen, the user name and password will be required to have access to the website. Three categories are possible:
 - If neither “administrator name” nor “user name” has been saved, everyone has full access to all functions.
 - If an “administrator name” has been saved but no “user name”, everyone can access the website and perform the manual switching functions. The “network configuration” can only be done from the administrator.
 - If an “administrator name” and a “user name” have been saved, the “administrator” and the “user” can access the website and perform the manual switching functions. The “network configuration” can only be done from the administrator.
9. Switch - if requested – the automatic time synchronization on. In order to use this

No.	Switch on (hh:mm:ss)	Switch off (hh:mm:ss)	Weekly	Daily
1	<input checked="" type="checkbox"/> 08:00:00	<input checked="" type="checkbox"/> 12:00:00	Mo <input checked="" type="checkbox"/> Tu <input checked="" type="checkbox"/> We <input checked="" type="checkbox"/> Th <input type="checkbox"/> Fr <input type="checkbox"/> Sa <input type="checkbox"/> Su	<input type="checkbox"/>
2	<input checked="" type="checkbox"/> 13:00:00	<input checked="" type="checkbox"/> 17:00:00	Mo <input checked="" type="checkbox"/> Tu <input checked="" type="checkbox"/> We <input checked="" type="checkbox"/> Th <input type="checkbox"/> Fr <input type="checkbox"/> Sa <input type="checkbox"/> Su	<input type="checkbox"/>
3	<input checked="" type="checkbox"/> 08:00:00	<input checked="" type="checkbox"/> 13:30:00	Mo <input type="checkbox"/> Tu <input type="checkbox"/> We <input type="checkbox"/> Th <input type="checkbox"/> Fr <input checked="" type="checkbox"/> Sa <input type="checkbox"/> Su	<input type="checkbox"/>
4	<input type="checkbox"/> 00:00:00	<input type="checkbox"/> 00:00:00	Mo <input type="checkbox"/> Tu <input type="checkbox"/> We <input type="checkbox"/> Th <input type="checkbox"/> Fr <input type="checkbox"/> Sa <input type="checkbox"/> Su	<input type="checkbox"/>

Figure 2

User		Network	
Admin name	admin	MAC	00:0D:13:20:00:25
Password		Hostname	TCIP1
Confirm		DHCP	<input type="checkbox"/>
User name	user	IP-address	192.168.0.2
Password	••••	Subnet-mask	255.255.255.0
Confirm	••••	Gateway	192.168.0.1
Time synchronization:	<input type="checkbox"/> GMT: +1	DNS server	192.168.0.1

Firmware version 2.0.0.1

Figure 3

feature you must enter data for “Gateway” and “DNS Server”.

10. With “send” the configuration will be saved.

System Settings with DHCP-Server

1. Connect the TC IP 1 with a patch cord (separately deliverable) to the local network.
2. Connect the temperature sensor (optional) at the spring terminals.
3. Push the TC IP 1 in a plug.
4. The TC IP 1 can be reached with a browser entering the address <http://192.168.0.2> or <http://TCIP1>.
5. With the button “network configuration” in the main menu (arrow, figure 2) you will access the system settings of TC IP 1 (figure 3).
6. In order to call up the TC IP1 directly, choose under “Network name” an individual name.
7. Now activate the DHCP-server (arrow, figure 3).
8. Proceed as described above under points 8 and 10. The TC IP 1 will be assigned a free IP-address.

Configuration

Impulse Mode

The output can be switched in impulse mode if needed. It will be distinguished between two kinds of impulses. The on-impulse switches on the output

for the selected time and the off-impulse switches off the output for the selected time. If the output is already switched on while sending an on-impulse,

"Making impulse" will be displayed in a window (figure 5). Click on „OK" and it will be switched off after passing the impulse time.

The current state will be displayed as state "on" or "off".

Figure 4

Switch on (hh:mm:ss)	Switch off (hh:mm:ss)	Message from Website		Daily
<input checked="" type="checkbox"/> 08:00:00	<input checked="" type="checkbox"/> 12:00:00	Making impulse OK		Su <input type="checkbox"/>
<input checked="" type="checkbox"/> 13:00:00	<input checked="" type="checkbox"/> 17:00:00			Su <input type="checkbox"/>

Figure 5

Switching Function

The TC IP 1 has an integrated time switching function. Up to 4 switching on and 4 switching off times can be selected. At any one time one switching on time is combined in a group with a switching off time. The days of a week can be allocated to each group. In the example at the bottom (figure 6) a laser printer of a company is connected at the

TC IP 1. The printer will be switched on from Monday to Friday at 8 o'clock in the morning and switched off at 12 o'clock. After the lunch break the printer will be switched on again at 13 o'clock and switched off at 17 o'clock. On Fridays the printer will be turned on at 8 o'clock in the morning and switched off at 13:30 o'clock. On weekends the printer is not in use. If the printer is

needed outside the programmed times, the user is able to switch the printer on at any time either with the built-in push-button or from the website.

With activation of the button "Save", the system time of the PC will be stored in the TC IP 1. The system time will be updated every second. The internal time of the TC IP 1 will be buffered up

to 4 days after disconnecting from the mains power supply. In order to avoid unnecessary traffic on the network, the display with the time of the TC IP1 will only be updated all 30 seconds.

No.	Switch on (hh:mm:ss)	Switch off (hh:mm:ss)	Weekly	Daily
1	<input checked="" type="checkbox"/> 08:00:00	<input checked="" type="checkbox"/> 12:00:00	Mo <input checked="" type="checkbox"/> Tu <input checked="" type="checkbox"/> We <input checked="" type="checkbox"/> Th <input checked="" type="checkbox"/> Fr <input type="checkbox"/> Sa <input type="checkbox"/> Su <input type="checkbox"/>	<input type="checkbox"/>
2	<input checked="" type="checkbox"/> 13:00:00	<input checked="" type="checkbox"/> 17:00:00	Mo <input checked="" type="checkbox"/> Tu <input checked="" type="checkbox"/> We <input checked="" type="checkbox"/> Th <input checked="" type="checkbox"/> Fr <input type="checkbox"/> Sa <input type="checkbox"/> Su <input type="checkbox"/>	<input type="checkbox"/>
3	<input checked="" type="checkbox"/> 08:00:00	<input checked="" type="checkbox"/> 13:30:00	Mo <input type="checkbox"/> Tu <input type="checkbox"/> We <input type="checkbox"/> Th <input type="checkbox"/> Fr <input checked="" type="checkbox"/> Sa <input type="checkbox"/> Su <input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/> 00:00:00	<input type="checkbox"/> 00:00:00	Mo <input type="checkbox"/> Tu <input type="checkbox"/> We <input type="checkbox"/> Th <input type="checkbox"/> Fr <input type="checkbox"/> Sa <input type="checkbox"/> Su <input type="checkbox"/>	<input type="checkbox"/>

Figure 6

Configuration

Switching Function

Switching functions, which overlap from one day to the other, are also possible. The example (figure 7) shows the settings for

the lighting of a shop window. The lighting is to be switched on daily at 17:00 o'clock. From Monday to Friday the lighting

has to be switched off at 7 in the morning. On the weekends – Saturday and Sunday – it has to be switched off already at

1 o'clock. In this example only one switching-on or switching-off time is activated in a group.

TC IP 1

Status Off

Send impulse (hh:mm:ss)
 On Off

System time Tuesday, 11:54:53
TC IP 1 time Tuesday, 11:54:48

Temperature 24 °C

No.	Switch on (hh:mm:ss)	Switch off (hh:mm:ss)	Weekly	Daily
1	<input checked="" type="checkbox"/> <input type="text" value="17:00:00"/>	<input type="checkbox"/> <input type="text" value="00:00:00"/>	Mo Tu We Th Fr Sa Su <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	<input type="checkbox"/> <input type="text" value="00:00:00"/>	<input checked="" type="checkbox"/> <input type="text" value="07:00:00"/>	Mo Tu We Th Fr Sa Su <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/> <input type="text" value="00:00:00"/>	<input checked="" type="checkbox"/> <input type="text" value="01:00:00"/>	Mo Tu We Th Fr Sa Su <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/> <input type="text" value="00:00:00"/>	<input type="checkbox"/> <input type="text" value="00:00:00"/>	Mo Tu We Th Fr Sa Su <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>

Figure 7

Factory Settings

The factory settings of the delivery state can be replaced with individual settings. In order to re-load the factory settings,

unplug the TC IP 1. Push both push-buttons of the device and insert the device with the pushed buttons in a power outlet. After

about 3 seconds the LED starts blinking to indicate that the factory settings have been restored.

Operating Elements

Push-buttons

on/off: Switches the connected devices directly on or off.

L/A: By pressing both push-buttons (on/off and L/A) the factory settings will be restored (see above).

LEDs

on/off: This LED indicates the switching state of the connected device. It lights up if the connected device is switched on.

L/A: This LED indicates the link and activity of the network connection. The LED flashes, if a user has accessed the home.

The power outlet of the TC IP 1 can be switched directly with the integrated push-button or from the website of the TC IP 1.

A connected temperature sensor displays the actual temperature on the website.

Technical Data

Dimensions L x B x H: 135 x 66 x 75.7 mm
Material: ABS VO (flame-retardant)
Weight: 170 g
Color: pure white (similar RAL 9010)

Temperature range
Operation: -20 to 55 °C
Storage: -25 to 70 °C

Protection class: IP20 according to EN 60529
Power supply: 100–240 V AC/50–60 Hz
Switching capacity: max. 250 V AC/50–60 Hz/16 A

Current consumption
output switched off, with network: app. 1 W
output switched on, with network: app. 1.6 W

Max. buffer time of settings: app. 4 days (after cutting off from 230 V)

Accesses

Network access RJ45, 10 Mbit/s

Temperature sensor (optional)

Article number: 700 802 201
Length: 0.6 m
Extension: to max. 10 m
Temperature range: -25–55 °C, resolution 1 °C
Temperature drift

-25 °C: 86.4 kΩ
25 °C: 10 kΩ
50 °C: 4.1 kΩ

B value: 3435 K ±1%

Troubleshooting

Fault	Help/Measure
Testing of the switching function	Press the On/Off-push-button
The LED L/A does not light up after the connection of the network patch cable	Check the network connection//patch cable
The TC IP 1 can not be switched via the network	Use an IP-address that belongs to the subnet (the first three number blocks of the IP-address must be identical).
	Check the network settings. Enter the command „ipconfig/all“under „Start/Programs/Accessory/Command prompt“.
	Switch off the Proxy-Server for local addresses At the Internet Explorer: Type in an exception under „Extra/Internet options/Connections/Lan-Connections/Extended“ for the IP-address of the TC IP 1 (i.e. 192.168.0.2).
Switching times will not be executed as programmed	Check the time of the TC IP 1

Manufacturer's Warranty

We guarantee the perfect function of the TC IP 1 for 2 years after date of purchase (receipt) assuming that it was professionally installed and operated.

Service

In case of a malfunction consult the expert who installed the TC IP 1 or send it with the receipt and a short description of the malfunction to the following address:

**Rutenbeck Service-Center
Gewerbegebiet
Im Meilesfelde 5
99819 Marksuhl
Germany**

**Phone +49 36925 90091
Fax +49 36925 90092**

Manufacturer's Declaration

We, Wilhelm Rutenbeck GmbH & Co. KG declare, that the TC IP 1 was manufactured under a full quality assurance system and that the mentioned equipment is in compliance with the essential requirements and provisions of the directives 2004/108/EG und 2006/95/EG.

The complete declaration of conformity can be found under www.rutenbeck.de in the download-sector.

Disposal of Waste



Please do your part to protect the environment by properly recycling this equipment at a collection point in the community for the disposal of electronic equipment according to the European Directive 2002/96/EG. Please consult your local authorities.

You should never dispose of this device in general unsorted garbage. Improper disposal of electronic waste can introduce dangerous substances into the environment and affect public health.

The recycling system will be financed since August 13, 2005 by manufacturers of electrical and electronic equipment.

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