Manual AK-SecurePowerSwitch AK-SecureSocketSwitch





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AK-SecurePowerSwitch



AK-SecureSocketSwitch

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General description

With the **SecurePowerSwitch** it is possible to switch any electrical devices on or off via the IP network or to monitor them. Due to its unique switching mode, the electrical consumers are gently, quickly and safely disconnected from or connected to the 110/230VAC mains voltage. Your electrical terminal is switched in only 10ms, i.e. half a sinus wave. To do so, no electro-mechanic relay, but a fully electronic solid state relay is being used. It particularly distinguishes itself by the following features:

- Almost unlimited service life
- High system reliability
- Short response time
- The loads are switched bounce-free and free from wear
- It is not possible to burn the contacts
- No switching clicks
- No electromagnetic emission (disturbing others)
- Service- and maintenance-free



Release (FSR) relay

The release relay has to completely disconnect the connected consumers from the 110/230VAC mains voltage. For reasons of safety this relay serves to disconnect the power supply of all sectors according to DIN VDE 0100. Therefore, it is designed with two poles and disconnects L and N simultaneously from the connected consumers. This relay is free of load, and it is not used to switch electrical devices.

SSR relay

The solid state relay is the actual switching relay and switches the electronic devices on or off. 100ms before and 100ms after the switching operation, the SSR relay is activated or deactivated. It is only used for wear-free and failure-free switching.

PWR relay

For very little loads of <10 watts, the solid state relay does not switch for technical reasons since it is below the so-called "**Minimum Load**". In order to also switch these loads (measuring instruments, small power supply units, etc.) this relay takes over the switching function. Furthermore, the PWR relay takes over the load when the SSR relay is being inactivated and thus avoids an unnecessary power consumption of the SSR relay.

Specifications:

Dimensions:	198 x 120 x 48 mm (LxWxH)					
Housing:	1mm metal housing					
Weight:	1.2 kg					
Temperature range:	-40°C + 70°C					
Standards:	CE / WEEE / RoHS-II EN 55022 Class B EN 55024 Class A					
System of protection:	IP30					
Power supply:	110-230VAC 50/60Hz About 2.5 watts					
Switching capacity:	110-230VAC 50/60Hz 10A or 2300 watts 8A or 2000 watts continuous load					
Connections:	1 x IEC box mounting receptacle C13 1 x IEC box mounting receptacle C14 With switch and fusing 2 x RJ45 (Mini-Hub) 1 x RS232 9Pol Sub-D connector					
Ethernet:	AutoM-DIX 10 Half Duplex 10 Full Duplex 100 Half Duplex 100 Full Duplex AutoSensing					
Network protocols:	IPv4, TCP, UDP, FTP, FTPS, TFTP, ICMP, ARP, SNMP, LPR, DHCP,BOOTP, DNS, TELNET, HTML, http, HTTPS, DYNDNS, SMTP, POP3, SYSLOG, IPv6, NDP, ICMPv6, DHCPv6, TCPv6, UDPv6, Netbios-NS, LLMNR, ZeroConfig(APIPA, AutoIP), IP-Multicast, SSL/TLS					
Solid state relay:	Zero-voltage switchOperating voltage= 48-660VACSwitching capacity= 50ASwitching time= 10msMax. overvoltage= 1200VpkMax. impulse peak= 625 A(10ms)Max. load category AC51= 50 AeffMax. load category AC53= 15 Aeff					

Front side



1.) Manual rocker switch with delay against accidental switching on.

Two functions can be attained by actuating these rocker switches:

1.) Factory default function.

All values of the **SecurePowerSwitch** are reset to factory settings. This function is enabled by pressing the switch after switching on the **SecurePowerSwitch** until 2 signal tones sound. Then the switch may be released.

2.) Manually switching the relay on or off.

This function is enabled by actuating the switch for about 2 seconds. Then 2 signal tones sound and the switch may be released. It is possible to set the actuating period of the switch in the configuration menu.

2.) Status display

These LEDs indicate the following states:

- **On/Off:** Indicates that the relays are switched on or off.
- **Network:** Indicates that the **SecurePowerSwitch** is receiving or sending network packages. It does not indicate the network activities. It is directly indicated on the rear side of the RJ45 bushing.
- **PS state**: Indicates the state of the process part. Should flash once per second in case of an emergency.
- **PS error**: Indicates an error, such as e.g. the relays are switched, but no current flows since the terminal is still switched off.

Rear side









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1.) Mains switch

By actuating this switch, all items may be switched zero potential and currentless. This is a two-pole on/off switch.

2.) Fuse holder (10A slowblow)

A fuse is located behind this flap. It can be accessed by unlocking the smaller clips using a screwdriver.

Caution: First, switch off the device!

3.) 110/230VAC input

4.) 110/230VAC output

Note:

It is possible to use cables with inlet connectors for non-heating apparatus IEC-60320 C13/C14 for the mounting sockets.

5.) Network connection

This is a small MiniHub. It automatically distributes the incoming and outgoing network traffic.

6.) RS232 interface

It can be used as DeviceServer and is provided for future functions such as e.g. room monitoring.

AK-SecureSocketSwitch

General description

The **AK-SecureSocketSwitch** is a switchable IP socket, which allows you to switch on or off any power consumers, to monitor them and to measure the current power consumption. Due to the integrated micro switch you do not need any additional power supply cable, since the **AK-SecureSocketSwitch** has two integrated network connections. The high-performance and safety relay which is equipped with silver tin oxyde contacts (AgSnO2), offers you a high switching capacity, a high level of durability as well as a reliable and trouble-free operation. The network connection is performed by default via a 1024Bit-SSL encryption and can additionally be secured or expanded by server and client certificates. The consumption data are logged for up to 30 days and can be displayed on the WEB monitor. Lots of additionally programmable software functions allow you to control, reduce and optimize your power consumption in a targeted and efficient way. Using our M2M solution, the **AK-SecureSocketSwitch** is easily and simply available via the Internet at any time. Without apps and without tools.

AK-SecureSocketSwitch

Functional mode of the relay



PWR Relay

The PWR relay has in particular high quality and is mechanically reliable relay. In particular the contact surfaces were additionally finished with AgSnO2 (silver tin oxyde) and therefore they have a little tendency to weld and a high burn-off resistance. Thus, the PWR relay offers you a high switching capacity, a high durability as well as a reliable and trouble-free operation.

AK- SecureSocketSwitch

Specification:

Dimensions:	135 x 55 x 40 mm (LxWxH)					
Housing:	Impact-proof ABS plastic					
Weight:	200 grams					
Temperature range:	-40°C + 70°C					
Defaults:	CE / WEEE / RoHS-II EN 55022 Class B EN 55024 Class A					
Protection class:	IP30					
Power supply:	110-230VAC 50/60Hz about 1.2 watts					
Switching capacity:	110-230VAC 50/60Hz 10A or 2300 watts					
Connections:	1 x CEE 7/4 connector plug (type 1 x CEE 7/4 power input (type F) 2 x RJ45 (mini hub)	e F)				
Ethernet:	AutoM-DIX 10 Half Duplex 10 Full Duplex 100 Half Duplex 100 Full Duplex AutoSensing					
Network protocols:	IPv4, TCP, UDP, FTP, FTPS, TF DHCP,BOOTP, DNS, TELNET, DYNDNS, SMTP, POP3, SYSLC DHCPv6, TCPv6, UDPv6, Netbic ZeroConfig(APIPA, AutoIP), IP-N	TP, ICMP, ARP, SNMP, LPR, HTML, http, HTTPS, OG, IPv6, NDP, ICMPv6, os-NS, LLMNR, //ulticast, SSL/TLS				
Relay:	Contact material Max. continuous current Max. switch-on current Nominal voltage Max. switching voltage Max. switching capacity AC1 Max. switching capacity AC15	= AgSnO2 = 16A = 25A = 250V = 400V = 4.000 VA = 750VA				

AK-SecureSocketSwitch

Front side:



1.) Optical consumption indicator

Depending on the power consumption of the connected device, the current power consumptions will be displayed with colours.

2.) Relay – LED

These LEDs indicate the following statuses:

- **On**: Indicates that the relay is switched on.
- Off: Indicates that the relay is switched off.

AK-SecureSocketSwitch

Rear side:



1.) Network connection

This is a small micro switch It automatically distributes the incoming and outgoing network traffic. Since you do not have to use an existing network connection during action, it will not be necessary to lay an additional network cable.

2.) Manual pushbutton (laterally recessed)

By this switching sensor it is possible to achieve two functions:

1.) Factory – Default function.

It allows resetting all values of the **SecureSocketSwitch** to factory settings. This is done by plugging the **SecureSocketSwitch** into an outlet while keep pressing the pushbutton. As soon as the consumption indicator illuminates two blue consumption indicators, you can release the pushbutton.

2.) Manually switch on/off the relay.

The relay starts ON or OFF by shortly pressing the pushbutton. The status is displayed with the green relay LED. Once the status indicates green, the optical consumption display will also be illuminated but in blue.

Determining the password

You may access the homepage of the **SecurePowerSwitch** via a web browser.

Enter e.g. http://192.168.100.100 and you will be asked to enter the user name and password.

Note:

If you do not know the IP address, you may also use the DNS name which is consisting of the "AKIF" and the last three digits of the MAC address when delivered. The MAC address can always be found on the device label of the **SecurePowerSwitch**. This label is at the bottom of the device.

For instance: 08-BB-CC-66-66-66 i.e. http://AKIF6666666

Verbindung herstelle	n mit akif666666	<u>? ×</u>
	G	
Der Server "akif66666 Benutzernamen und ei Warnung: Dieser Serve Benutzernamen und Ke (Basisauthentifizierung	6" an "protected area" erforder n Kennwort. er fordert das Senden von ennwort auf unsichere Art an gohne eine sichere Verbindung)	t einen
<u>B</u> enutzername:	£ xt ■	•
I	 Kennwort speichern 	
	OK Abbr	echen

The user name and the password in the delivery status are always "**XT**" and can be written in upper or lower case letters.

Then you are requested to enter the user name and the password. For safety reasons, this page will be displayed until you have determined the user name and the password.

PowerSwitch - Windows Internet Explorer			_ _ _ ×
	🗙 🕂 🔄 🗖 ۹	PowerSwitch X	î ☆ ‡
Monitoring	Manual	Configuration	Logout
Configuration			English 💌
IP-Address	192.168.23.188		Reboot
Subnet mask	255.255.0.0		Change Password
DNS/Host name	AKIF666666		
DHCP	N		
AK-SecurePowerSw Switch	<u>vitch</u>	AK-NORD	

After having made all entries, press the button **"Save"** and then switch over to the **"Monitor"**.

The Web monitor can be easily attained without any additional APP via the network, the Internet or via a mobile terminal such as e.g. a mobile phone. It indicates all relevant data in real-time and you will immediately get an overview of the consumption or the output of the connected electrical consumer.



Note:

The existing WEB interface can be replaced, adapted or modified to the specific customer requirements. A flash file system is available which can be reached easily and simply after having activated it via an FTP connection. There you will find the complete homepage of the **SecurePowerSwitch**.

Standard configuration:

To do so, press the button **Configuration** again in the top menu.

PowerSwitch - W	/indows Internet Explorer	and the second second second second second			
	tp://192.168.23.188/	🗴 📌 🔄 🚬 ۹	@ PowerSwitch	×	6 🛠 🔅
Datei Bearbeiten	<u>Ansicht Eavoriten Extras ?</u>				
			Y		
	Monitoring	Manual	Configuration	Logout	
	Configuration			English 💌	
	IP-Address	192.168.23.188		Reboot	
	Subnet mask	255.255.0.0		Change Password	
	DNS/Host name	AKIF666666		Timer settings	
	DHCP	N -			
	AK-SecurePowerS	witch	AK-NO	RD	9 100% · · ·

Then you can determine the IP address, the subnet mask, the DNS/Host name as well as the DHCP procedures. By clicking on **"Save"** these values are continuously saved in the **SecurePowerSwitch**.

Note:

As long as the **DHCP** is positioned on **"Y"**, it is not possible to modify neither the IP address nor the subnet mask.

Note:

The modified values are only taken over when the system is restarted. To do so, press the button "**Restart**".

Timer settings

Activate a timer using this menu. To do so, first set the exact time. You may either activate an Internet time (NTP) or you may set the internal Real-Time-Clock (RTC).

NTP:

Set "NTP Y/N" to "Y" and press the button "Save". After restarting, the NTP time will fade in.

Note:

To do so, it is necessary to connect the AK-SecurePowerSwitch to the Internet or to a ntp-server in the LAN.

RTC: (in preparation)

The current PC will be faded in. Press the button "Adopt" and the time will be saved in the RTC.

Note:

After a few days you should check the time. If you detect a considerable deviation between the PC time and the RTC time, then press again the button "Apply". If you repeat this process more often, fewer deviations will occur. This will be attained by an internal automatic correction.

PowerSwitch - Windows Intern	et Explor	er								
	99/		• ٩	🗟 🐓 🗙	Powers	Switch	×			ि ☆ ☺
				HP'	V1.5.9					
Мо	onitoring		Manua	al		Configuration		Logou	ıt	
Monitoring									English 💌	
				NTP	- Time					
NTP (Y/N)		¥ ▼	NTP Time	e-server1	1.de.poo	.ntp.org				
NTP update	time	01 💌 hours	NTP Time	e-server2	2.de.poo	.ntp.org				
NTP Time-Z	lone	GMT+01:00 -	NTP Time	e-server3	ntp1.t-on	line.de				
NTP Time		Mon 10:21:03	3 NTP Time	e-server4				Save		
				RTC	- Time					
RTC Time		Mon 10:21:03	B PC Time		Mon 11	:21:03		Apply		
				Switch	ing timor		I			
		Power on	Power off	Switch	ing times	Power on	Power off			
Condition	n/Day	Time	Time	when	Watt	Time	Time	when	Watt	
Sunday					0		🖬 🔽		0	
Monday					0		🔽 : 🔽		0	
Tuesday					0		🔽 : 🔽		0	
Wednesday	/ 🗖				0		🖬 💌		0	
Thursday					0		- 🖬 - 🔽		0	
Friday					0		🔽 🔽		0	
Saturday					0		🖬 💌		0	
					910		URD			
					die					

AK-SecurePowerSwitch Manual,

Make sure that NTP settings are correct and the correct time is displayed in the "NTP Time" field. This is a prerequisite for switching on/off correctly.

You can set a time for switching on and a time for switching off for each day of the week. To do this, please use a separate block (left/right) of each weekday. The fields "when" and "Watt" are optional and can be saved unchanged with "--" and 0.

For example, if the power is to be switched off on Sundays at 10:00 and switched on at 14:00, the line for Sunday would look like this:

		S	witchi	ng times				
Condition/Day	Power on	Power off			Power on	Power off		
Condition/Day	Time		when Watt		Time	Time	when	Watt
Sunday 🔽		10 🗸 : 00 🗸	🗸	0	14 🗸 : 00 🗸		🗸	0

Watchdog Function:

In this menu you can control switch processes which are triggered depending on the availability of devices in the network.

Note:

The Watchdog Function **as well as** the Timer Function do not block each other. Mind possible overlapping in order that no unnecessary or uncontrolled switch processes are performed if you have programmed switch processes for both functions.

PowerSwitch - Window	ws Internet E	xplorer											
				• ٩	🗟 😽 🗙	0	PowerSwitch		×				☆ 🔅
					HP	V1.5	.9						
		Aonitoring		Manual			Configuration	on			.ogout		
	Monitorin	g									Eng	jlish 💌	
					Ping	setti	ings						
	Ping		IP/DNS	address			switching process		On		Off		
	remote sta	ation 1					signal + timeout(s	ec)	5		5		
	remote sta	ation 2					switching function		power up		power do	wn	
	remote sta	ation 3					timeout(sec)		5		5		
	remote sta	ation 4					switching function		None	-	None	-	
	remote sta	ation 5					ping continue(sec)		5		5		
	-/-	If relais	che	eck	all		whether	lf		then			
	1 🔲		- ren	note station 1 💌	5	sec		3	times	condi	itional 💌 i	toggle	
	2 🔲	-	✓ ren	note station 1 💌	5	sec	- •	3	times	imme	diate 💌	toggle	
	3 🔲	-	▼ ren	note station 1 💌	5	sec	🔽	3	times	imme	diate 💌 t	toggle	
	4 🗖	-	✓ ren	note station 1 💌	5	sec	🔽	3	times	imme	diate 💌	toggle	
	5 🔲		✓ ren	note station 1 💌	5	sec	🔽	3	times	imme	diate 💌	toggle	
	6 🔲		✓ ren	note station 1 💌	5	sec	🔽	3	times	imme	diate 💌 t	toggle	
	7 🗖	-	- ren	note station 1 💌	5	sec		3	times	imme	diate 💌	toggle	
	8 🔲	-	• ren	note station 1 💌	5	sec	- 🔽	3	times	imme	diate 💌	toggle	
	9 🗖		- ren	note station 1 💌	5	sec	🔽	3	times	imme	diate 💌	toggle	
	10		- ren	note station 1 💌	5	sec	- •	3	times	imme	diate 💌	toggle	
			Γ	Save			Clear all valu	Jes					

Possible switch conditions:

Immediately:If the current condition of the row is valid, it is immediately
switched over.Conditionally:All rows need to be valid which have the current relay
switch status.

History function:

Using the History function you can view the last 15 switch operations. It is displayed which switch functions were triggered on which date at what time.

C PowerSwitch - windo	ows Internet Explorer				<u> </u>
C	kif666666/	× 🕫 🛛 🖣	<i>i</i> PowerSwitch		♠ ☆ ‡
		HPV	1.5.9		
	Monitoring	Manual	Configuration	Logout	8
	Configuration > History			English 💌	
		Hist	tory		ę.
	00000 09.08.2014 13 00001 09.08.2014 13 00002 09.08.2014 13 00003 09.08.2014 13 00004 09.08.2014 13	:38:24 ON WebService :38:25 OFF WebService :38:26 ON WebService :38:28 OFF WebService :38:29 ON WebService	a a a a		
	AK-SecurePowerSw	Clear	values		

Possible entries:

WebService:	A switch function was triggered via the homepage
Software:	A switch function was triggered via a TCP/IP connection
OverCurrent:	The measured current flow was too high.
StartUp:	When switching the PowerSwitch it was determined that it shall be switched on immediately.
Button:	The external switch was pressed.

Options :

Additional options may be activated via this menu.

PowerSwitch - Windows Internet Explorer				<u>_ </u>
	P 🛛 😽 🗙	PowerSwitch ×		⊕ ☆ ↔
	HP\	/1.5.9		
Monitoring	Manual	Configuration	Logout	
Configuration > Options			English 💌	
maximum power 2	300 Watt	[Clear values	
after reboot relais on				
M2M Account				
M2M Password				
M2M Server				
AK-SecurePowerSu Switch	witch	AK-NOR		

Possible options:

Maximum power:	With respect to safety you can determine a value in watts which must not be exceeded. If this value is attained, the relay will automatically switch off.
After restart, relay on:	Here you can determine if the relay is automatically switched on after switching on.
M2M – Account name: M2M – Password:	Set up an account under <u>www.myopengate.com</u> and enter the access data as well as the password under the account name.
M2M – Server:	Enter the rendezvous server here. In this case "akserver1.com"

Note:

These functions are only activated after restarting the system. Do not use any special characters for the account name and the password and pay attention to the using upper and lower case letters!

Expert configuration

Log in by entering the administrator name in order to perform continuing or special configurations. To do so, click on the button "Log out" in the top menu and then click again on the button "Monitor".

Then you will be asked to enter a user name and the password. Do not use your standard user name, but "AKIF" and the last three digits of the MAC address. The MAC address can always be found on the device label of the **SecurePowerSwitch**. This label is positioned at the bottom of the device.

In this example :**AKIF666666** and your **standard** password.



Click again on the button "**Configuration**" in the top menu and then the button "**Expert-Settings**" will be displayed.

C PowerSwitch - W	indows Internet Explorer				_ 🗆 ×
🔆 🕑 🗢 🧖 htt	p://192.168.23.99/	₽ 🖌 😣	PowerSwitch		🕯 🛠 🌣
		HPV	/1.5.9		
	Monitoring	Manual	Configuration	Logout	
	Configuration			English 💌	
	DNS/Host name	AKIF999999		Reboot	
	auto IP	N	ĺ	Change Password	
	IP-Address	192.168.23.99	ĺ	History	
	Subnet mask	255.255.0.0		Timer settings	
	Standard Gateway	192.168.23.1		Watchdog settings	
	DNS-Server	192.168.23.1		Options	
	AK-SecurePowers	Save	AK-NOF		

Enter the special configuration menu of the **SecurePowerSwitch** by pressing the button **"Expert-Settings"**.

Then you have the option to perform any setting.



Note:

Please find below an explanation of the configuration menu. Please find further information regarding the whole menu under:

http://www.ak-nord.de/de/daten/handbuch_xxl_ts.pdf

Select "I" for "INTERFACE MENU". To do so, enter an "I" into the input row and then press the button "ENTER". Then press "1+ENTER" and once again "1+ENTER". Then you are in the **"Config Menu"** of the **SecurePowerSwitch**.

Configuration menu



Note:

In order to modify the value, first enter the figure or the letter of the menu item, the icon "=" and then the new value. Confirm your entry by pressing the button "ENTER". Then the menu will be displayed with the new value.

1 = Relay mode

Currently not activated.

2 = Button hold = 2sec

Time in seconds which has to pass until a manual switching process is accepted by pressing the button on the front panel.

3 = Relay power on = N

Herewith you may decide if the relay is automatically switched on or not after having switched on the device.

4 = Off if greater = 2000 watt

Herewith you may determine when the **SecurePowerSwitch** will automatically switch off.

6 = Access password =

Setting the password for the TCP/IP port. The password only has to be transmitted if it has been configured accordingly. If a password is required, it must sent at the beginning of the data transfer, otherwise a communication is not possible and the control port will immediately be closed.

7 = Local Port = 1002

Herewith you determine the TCP-IP control port for the ASCII commands. It is blocked if it is set to "0".

8 = With SSL/TLS = N

Herewith you determine if the control port is only enabled via an encrypted connection. N = unencrypted. Y = encrypted via SSL/TLS

Changing the homepage

In order to access the Flash-File system of the **SecurePowerSwitch** enter e.g. ftp://akif6666666 in the Internet Explorer instead of http://akif66666666. You also have the option to use an FTP program.



Change-over to the FTP screen of the Internet Explorers.



👔 ftp://akif666666/				- 🗆 🗵
O O v I tp://akif666666/		– 🛃	Suchen	
🕘 Organisieren 👻 🏢 Ansichten 🤜	•			0
Linkfavoriten Dokumente Bilder Misik	Name A PORT2 VOLUME1	Größe	Änderungsdatum 24.02.2008 02:00 24.02.2008 02:00	
Weitere »				
Ordner Desktop AK Offentlich Computer Netzwerk Thernet AK Netzwerk Thernet PORT2 VOLUME1 Mell Systemsteuerung Papierkorb Tap-driver-32_64				
VOLUME1 auf akif6	66666			
1 Element ausgewählt		Benutzer: xt	😜 Internet	li

Then, select the folder "Volume1"

👔 ftp://akif666666/VOLUME1/				
G 🖓 🗍 ftp://akif666666/VO	LUME1/	- 5	Suchen	
🕘 Organisieren 🔻 📗 Ansichten	•			0
Linkfavoriten Dokumente Bilder Bilder Musik Weitere >> Ordner Desktop AK Offentlich Computer Rezwerk Computer Rezwerk Finternet Perset Destrop PORT2 VOLUME1 Systemsteuerung Papierkorb Destrop	Name A	- Grα6	Be	
2 Elemente		Benutzer: xt	S Internet	

Then you can change, delete or replace the existing homepage.

Note:

Make sure that the index file is always named "index.htm". Always copy the SSL certificates or a new UPDATE on the root directory "**Volume1**". For the update, please first delete the directory HTML and the index.htm. Then copy the update on the "**Volume1**" and **restart** the system.

Replacing the firmware

Please proceed in the same way as for "Changing the homepage". But delete the directory "HTML" as well as the "index.htm" and subsequently copy the update on the root directory (Volume1). Then close the FTP Explorer and click on "Restart"

E PowerSwitch - Windows Internet Explorer				
	۶ 🔄 🖄 🔁	PowerSwitch	:	₼ ☆ ७
	HP	V1.5.9		
Monitoring	Manual	Configuration	Logout	
Configuration			English 💌	
DNS/Host name	AKIF999999] [Reboot	
auto IP	N		Change Password	
IP-Address	192.168.23.99		History	
Subnet mask	255.255.0.0		Timer settings	
Standard Gateway	192.168.23.1		Watchdog settings	
DNS-Server	192.168.23.1		Options	
AK-SecurePown	Save erSwitch	AK-NOF		

Note:

The previously deleted homepage will be automatically recreated.

Encryption and certificate control

When using SSL/TLS without other or special certificates the internal certificates of the **SecurePowerSwitch** are always used for a connection via HTTPS or a secured TCP/IP connection. In this way, it is guaranteed that the data exchange is encrypted in any case and that it is not possible to read the content in the network. However, the Browser will always indicate an unsafe connection.

🙋 Zer	tifikatfehler: Navigation wurde geblockt - Windows Internet Explorer
G	🔊 🗢 🌈 https://100.100.218/ 🔎 🔽 🎸 Zertifikatfehler: Navigation 🗙 🟠 🏠 🔅
<u>D</u> atei	Bearbeiten Ansicht Favoriten Extras ?
🟠 -	🔊 🔻 🖃 🖶 👻 Seite 👻 Sigherheit 👻 Extras 👻 🕢 🐔
	Es besteht ein Problem mit dem Sicherheitszertifikat der Website.
	Das Sicherheitszertifikat dieser Website wurde für eine andere Adresse der Website ausgestellt.
	Die Sicherheitszertifikatprobleme deuten eventuell auf den Versuch hin, Sie auszutricksen bzw. Daten die S an den Server gesendet haben abzufangen.
	Es wird empfohlen, dass Sie die Webseite schließen und nicht zu dieser Website wechseln.
	🧭 Klicken Sie hier, um diese Webseite zu schließen.
	😵 Laden dieser Website fortsetzen (nicht empfohlen).
	 Weitere Informationen
•	
	🔍 100% 👻

This is due to the reason that the browser (Client) obtains a certificate of the **SecurePowerSwitch** (Server) when establishing the connection which cannot be checked or which was signed by a certification body (CA) that is unknown to the browser. It is also possible that the certificate was created for another name (CN) which does not correspond to the above indicated address (IP).

Server certificate (Server side certificate)

In order that the Browser (Client) establishes a connection to the **SecurePowerSwitch** (Server) and is able to determine without doubts that it is really connected to the **SecurePowerSwitch** and is able to determine without doubts that it is really connected to the **SecurePowerSwitch** (Server). To do so, have a certificate created by a "CA" for the DNS name of the **SecurePowerSwitch**, e.g. "AKIF6666666" and install it on the **SecurePowerSwitch** (Server). To do so, please proceed in the same way as for "Modifying homepage" and copy the certificate on the root directory (**Volume1**) of the **SecurePowerSwitch**.

The certificate must have the following properties.

The suffix of the certificate always has to read xxxxxxx.CRT. The suffix of the key always has to read "xxxxxxx.KEY". The file name has to read "AKIF" with the last three digits of the MAC address or "AK_SERVER". The letters can be upper or lower case. Both files have to be saved in the "PEM"" format.

Example:

The MAC address reads **08-BB-CC-66-66.** Then you can either copy AKIF6666666.CRT AKIF6666666.KEY

or

AK_SERVER.CRT AK_SERVER.KEY

to the SecurePowerSwitch.

👔 ftp://akif666666/VOLUME1/	/		
G 🖓 🚺 ftp://akif66666	5/VOLUME1/	💌 🚺 Sud	hen Hier eingeben, um die al
🕘 Organisieren 👻 📗 Ansicht	ien 🔻		0
Linkfavoriten Dokumente Bilder Musik Weitere »	Name A html k_ca.crt akif6666666.crt index.htm	▼ Größe	Nanderungsdatum 01.04.2007 02:00 1 KB 01.04.2007 02:00 1 KB 01.04.2007 02:00 1 KB 01.04.2007 02:00 1 KB 01.04.2007 02:00 6 KB 01.04.2007 02:00
Ordner Desktop AK Öffentlich Computer Netzwerk	× *		
5 Elemente			
5 Elemente		Benutzer: xt	Internet //.

If you create a certificate yourself e.g. by using the OPENSSL tool then you have to install the corresponding CA file using the public key on your browser.

Note:

If the certificate is edited by an official "CA" it is not necessary to do anything else.

wischenzertifizierungsstelle	Nertrauenswürdige Sta	mmzertifizierun	ngsstellen Vertrauens
Ausgestellt für	Ausgestellt von	Gültig bis	Angezeigter Name
🔄 AAA Certificate Ser	AAA Certificate Services	01.01.2029	COMODO
🔄 AddTrust External	AddTrust External CA	30.05.2020	USERTrust
🙀 ak-Nord	AK-NORD	30.11.2032	<keine></keine>
🔄 Baltimore CyberTru	Baltimore CyberTrust	13.05.2025	Baltimore Cyber
🔄 Certum CA	Certum CA	11.06.2027	Certum
🔄 Class 3 Public Prima	Class 3 Public Primary	02.08.2028	VeriSign Class 3
🔄 Class 3 Public Prima	Class 3 Public Primary	08.01.2004	VeriSign
🔄 Copyright (c) 1997	Copyright (c) 1997 Mi	31.12.1999	Microsoft Timest
Deutsche Telekom	Deutsche Telekom Ro	10.07.2019	Deutsche Teleko
nportieren Exportieren Beabsichtigte Zwecke des Ze «Alle»	n <u>E</u> ntfernen		Er <u>w</u> eiter <u>A</u> nsicht

Restart the browser and then enter e.g. "HTTPS://AKIF6666666". Your Browser will no longer indicate an unsafe connection.



Client certificate (Client side certificate)

Client certificates do not distinguish themselves from the server certificates but they are used in another way. A server certificate serves a browser for instance to verify the identity of a **SecurePowerSwitch** (Server). On the other hand, a client certificate would allow the **SecurePowerSwitch** (Server) to check the identity of the user of the browser. Thus, there is the option to allow access to the **SecurePowerSwitch** only to admitted or selected users via the browser via the encrypted TCP/IP connection.

To do so, it is possible to create a client certificate by the certification body (CA) and also to install it on the corresponding browser.

Zertifikate				×
Beabsichtigter Zweck: <a>Alle	>			•
Eigene Zertifikate Andere P	Personen Zwischenzertifi	zierungsstellen	Vertrauenswürdige	. ▲ ►
Ausgestellt für	Ausgestellt von	Gültig bis	Angezeigter Name	
powerswitch	AK-NORD	01.12.2033	<keine></keine>	
Importieren Exportieren	n <u>E</u> ntfernen		Er <u>w</u> eite	ert
Beabsichtigte Zwecke des Ze	ertifikats			
			Ansich	nt
Weitere Informationen über 2	Zertifikate		<u>S</u> chließ	en

After that, you have to copy the corresponding CA file including the public key to the **SecurePowerSwitch** (Server) and to set the **"Server verify opt"** in the SSL menu to **"7"**.

The CA file must have the following properties.

The name of the CA file must always read AK_CA.CRT The letters can be upper or lower case. The file has to be saved in the **"PEM"** format.

Restart your browser and enter e.g. "HTTPS://AKIF6666666". Your Browser will ask you to select a client certificate for the connection. If your browser cannot prove this certificate or if you transfer the wrong certificate the connection will not be admitted.

🖉 Google - Windows Internet Explorer	
Image: Second	⋒ ☆ 🕸 .
<u>Datei B</u> earbeiten <u>Ansicht F</u> avoriten E <u>x</u> tras <u>?</u>	
🔄 🚰 Star_tseite 🔹 🔊 Feeds (1) 👻 🖻 E-Mail lesen 🚗 Drucken 🔹 Seite 🔹 Sigherheit 👻 Extras 🔹 🔞 Hilfe 👻 🎎 Recherchieren	
+lch Suche Bilder Maps Play YouTube News Gmail Drive Kalender Mehr+	
Digitales Zertifikat auswählen	ANMELDEN
Die Website, die Sie ansehen möchten, erfordert eine Identifizierung. Wählen Sie ein Zertifikat aus.	
Name Aussteller	
powerswitch AK-NORD	
Details Zertifikat anzeigen	
OK Abbrechen	1
Werbeprogramme Unternehmen Über Google Datenschutzerklärung & Nutzungsbedingungen	Einstellungen Google.com
Cookies helfen uns bei der Bereitstellung unserer Dienste. Durch die Nutzung unserer Dienste erklären Sie sich damit einverstan ok Weitere Informationen	den, dass wir Cookies setzen.

Note:

If you do not want to purchase an official certificate for your application we will help you in creating these certificates using the OPENSSL tool.

Data exchange via TCP/IP

Test program



It is possible to test all control commands via the network using the PSW test program. It includes the network protocols TCP and UDP and can be used under Windows. It shows the sent and and received control commands.

Commands

Cmd	Bytes	Meaning	Answers	Bytes	Meaning	Protocol
<ver></ver>	5	Read version	<1.0>	5	Software version 1.0	UDP/TCP
<tmp></tmp>	5	Get temperature	< 27>	5	+27°	UDP/TCP
			<err></err>		Unknown	
			<-29>		-29°	
 BUZ>	5	1 x Signal tone	 BUZ>	5	Signal tone	UDP/TCP
<pw?></pw?>	5	Power Info	<on></on>	4	Relay switched on.	UDP/TCP
			<off></off>	5	Relay switched off.	
<pw1></pw1>	5	Power ON	<on></on>	4	Switch on relay	UDP/TCP
<pw0></pw0>	5	Power OFF	<off></off>	5	Switch off relay	UDP/TCP
<pwr>></pwr>	5	Power Read	<0>	3-6	Power consumption in	UDP/TCP
			<2300>		watts	
<rm?></rm?>	5	Relay mode	<rm0></rm0>	5	Request of the	UDP/TCP
			<rm1></rm1>		switching mode	
			<rm2></rm2>			
<rm0></rm0>	5	Relay mode0	<rm0></rm0>	5	No possible	UDP/TCP
<rm1></rm1>	5	Relay model	<rm1></rm1>	5	No possible	UDP/TCP
<rm2></rm2>	5	Relay mode2	<rm2></rm2>	5	No possible	UDP/TCP
<cs1></cs1>	5	Power	<>		last 60 sec.	UDP/TCP
		consumption				
<cs2></cs2>	5	Power	<>		last 60 min.	UDP/TCP
		consumption				
<cs3></cs3>	5	Power	<>		last 24 h	UDP/TCP
		consumption				
<cs4></cs4>	5	Power	<>		last 30 days	UDP/TCP
		consumption				
<>	3-17	Password		0	Send password	UDP/TCP

Control: Port 1002 (can be set). All characters are transmitted in ASCII

Remark: Password

The password only has to be transmitted if it has been configured accordingly. If a password is required, it must sent at the beginning of the data transfer, otherwise a communication is not possible and the control port will be immediately be closed. Refer to **"Expert-Settings"**.

Remark: Temperature

The temperature is not the environmental temperature of the **SecurePowerSwitch**. It is rather the internal temperature or the temperature of the switching. Here it shall be tested if the connected consumers will cause an overload of the relay as well as of the switching. In this case, the device would automatically switch off. Temperatures of up to $+70^{\circ}$ are usual. For this setting it is possible to set a threshold value in the configuration.

Remark: Power consumption

It indicates the effective current consumption of the connected consumers in watts.

Note:

CS1-4 can only be read from version 1.5.0.

Data exchange by XML

Read data

Execute an HTTP-GET "AK PS.XML?reg=64830" and you will get the following answer:

```
<?xml version="1.0" encoding="UTF-8"?>
<ak ps>
      <IP>192.168.23.188</IP>
      <SN>255.255.0.0</SN>
      <NAME>AKIF666666</NAME>
      <DHCP>Y</DHCP>
      <MODE>0</MODE>
      <WATT>0</WATT>
     <TEMP> 36</TEMP>
      <CLOCK>00:00</CLOCK>
     <STATUS>OFF</STATUS>
</AK PS>
                 = IP address in ASCII
<IP>
```

= Subnet mask in ASCII
= DNS/Host Name in ASCII
= DHCP switched on (Y) or off (N)
= Relay mode (not used)
= Effective current consumption of the connected device
= Internal temperature
= Effective time (NTP)
= Relay switched on (ON) or off (OFF)

From Version 1.5.0 you may additionally read the consumption data. Execute an HTTP-GET "AK_PS.XML?reg=64830&consumption=1" and you will additionally obtain <CONSUMPTION>:

```
<?xml version="1.0" encoding="UTF-8"?>
<ak ps>
    <IP>192.168.23.188</IP>
    <SN>255.255.0.0</SN>
   <NAME>AKIF666666</NAME>
   <DHCP>Y</DHCP>
   <MODE>0</MODE>
    <WATT>0</WATT>
    <TEMP> 36</TEMP>
    <CLOCK>00:00</CLOCK>
   <STATUS>OFF</STATUS>
    0,0,0,0,0,0,0,0,0,0,0,0,0,0</CONSUMPTION>
</AK PS>
```

```
Consumption data of the last 60 seconds in watts
consumption=1
                  Consumption data of the last 60 minutes in watts
consumption=2
consumption=3
                  Consumption data of the last 24 hours in watts
                  Consumption data of the last 30 days in watts
consumption=4
```

Note: "reg=64830" is not necessary to be sent It only serves to distinguish the single requests.

Data exchange by XML

Switching the relay:

Execute an HTTP-POST "AK_PS.XML" and send the following XML data

```
<?xml version="1.0" encoding="UTF-8"?>
<AK_PS>
<STATUS>TOGGLE</STATUS>
</AK_PS>
```

<STATUS> = TOGGLE = switching over = OFF = switching off = ON = switching on

Application example 1

Automatic switching the power consumers in the office on or off:

Switches off all power consumers which are not required, if certain working places are not used. Often devices such as photocopying machines, departmental printers, franking machines and other office machines are switched on overnight, unless they are not used and thus energy is consumed unnecessarily.

Example: Departmental printers:

You have a department with 5 working places which access the same departmental printer. If all 5 working places are switched off, the departmental printer may also be switched off. As soon as the first working place is switched on again, the departmental printer should also be switched on again.



Settings:

First enter the IP addresses or the DNS names of the workings station which needs to be monitored under **"Target station"**. You can enter the conditions in the lower area of the page. In this case, the **SecurePowerSwitch** checks with the conditions 1 to 5 if the corresponding working station are not available. If all 5 working stations are no longer available, the **SecurePowerSwitch** switches off the departmental printer. The conditions 6 to 10 are used to check if one of the working stations was switched on again and is available. If this is the case, the **SecurePowerSwitch immediately** switches on the departmental printer.

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Configu	ration > Watchd	og settings						Engl	ish 💌	
Ping settings										
Ping		P/DNS address			switching process		On	0#		
remote	station 1	92.168.23.101			signal + timeout(se	ec)	5	5		
remote	station 2	92.168.23.102			switching function		power up	power dov	vn	
remote	station 3	92.168.23.103			timeout(sec)		5	5		
remote	station 4	92.168.23.104			switching function		None	▼ None	-	
remote	station 5	92.168.23.105	168.23.105			ping continue(sec) 5				
-/-	If relais	check	all		whether	lf		then		
1	power up 💌	remote station 1 -	5 s	sec	unreachable 💌	3	times	conditional - to	oggle	
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3 🔽	power up 💌	remote station 3 -	5 s	sec	unreachable 💌	3	times	conditional 💌 to	oggle	
4 🔽	power up 💌	remote station 4	5 s	sec	unreachable 💌	3	times	conditional 💌 to	oggle	
5 🔽	power up 💌	remote station 5 💌	5 s	sec	unreachable 💌	3	times	conditional 💌 to	oggle	
6 🔽	power down 💌	remote station 1 ▼	5 s	sec	reachable 💌	3	times	immediate 💌 to	oggle	
7 🔽	power down 💌	remote station 2 -	5 s	sec	reachable 💌	3	times	immediate 💌 to	oggle	
8 🔽	power down 💌	remote station 3 -	5 s	sec	reachable 💌	3	times	immediate 💌 to	oggle	
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				Clear all valu	es					

In order to check the function, the individual numbers of the conditions indicate the status of the test in colours.

Green: The condition applies.

- Yellow: The condition applies; the test is not completed yet.
- **Red**: The condition does not apply.

Application example 2

Automatic switching on or off the power consumers at a working place:

Switches off all power consumers at the working place as soon as the PC is switched off. Often devices such as working place printers, monitors and other office machines are switched on overnight, unless they are not used and thus energy is consumed unnecessarily.

Example: Working place:

You have a working place with a PC, monitor, printer and a working place lamp. If the PC/computer is switched off, all power consumers should be automatically switched off.





Settings:

First enter the IP addresses or the DNS names of the workings station which need to be monitored under "Target station". In this case it regards your working place computer. You can enter the conditions in the bottom part of the page. Then, the **SecurePowerSwitch** checks if the working station indicated under "Target station 5" is available or not. If the computer is available in the network, i.e. if it was switched on, then the Condition2 applies and the power consumers will be switched on. If the computer is switched off again, then the Condition1 applies and the power consumers will be switched off again.

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	Ping settings													
	Ping			IP/DN	NS address			switching process		On		Off		
	remote	e sta	tion 1					signal + timeout(s	sec)	5		5		
	remote	e sta	tion 2					switching function		power up		power d	own	
	remote	e sta	tion 3					timeout(sec)		5		5		
	remote	e sta	tion 4					switching function		None	-	None	-	
	remote	e sta	tion 5	192.1	68.23.80			ping continue(sec		5		5		
	-/-		If relais	C	check	all		whether	lf		then			
	1	~	power up	-	remote station 5 💌	5	sec	unreachable 💌	3	times	imme	diate 💌	toggle	
	2	~	power down	-	remote station 5 💌	5	sec	reachable 💌	3	times	imme	diate 💌	toggle	
	3			-	remote station 1 💌	5	sec	- 🔽	3	times	imme	diate 💌	toggle	
	4			-	remote station 1 💌	5	sec	- 🔽	3	times	imme	diate 💌	toggle	
	5			-	remote station 1 💌	5	sec	🔽	3	times	imme	diate 💌	toggle	
	6 [-	remote station 1 💌	5	sec	🔽	3	times	imme	diate 💌	toggle	
	7			-	remote station 1 💌	5	sec	- 🔽	3	times	imme	diate 💌	toggle	
	8			-	remote station 1 💌	5	sec	🔽	3	times	imme	diate 💌	toggle	
	9 [-	remote station 1 💌	5	sec	- 🔽	3	times	imme	diate 💌	toggle	
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					Save			Clear all val	ues					ļ

In order to check the function, the individual numbers of the conditions indicate the status of the test in colours.

- **Green**: The condition applies.
- Yellow: The condition applies; the test is not completed yet.
- **Red**: The condition does not apply.

Application example 3

Time and consumption-controlled switching the power consumers on or off:

Switching off the working place at a certain point in time, **if** it is no longer used. In this way it is made sure that all devices which are no longer needed such as working place printer, working lamps, etc. are switched off at the end of the office hours.

Example: Working place:

You have core working hours from 8 a.m. to 5 p.m. and your working place includes a PC, monitor, printer and a working place lamp. If the PC is running in the standby mode or is switched off you only consume 60 watts at the working place, otherwise you consume 120 watts. With the help of the power consumption it is possible to determine if the working place is currently used or not.





Settings :

Enter the working hours for each day of the week. I.e. at what time the working place shall be supplied with power and when power shall be switched off. Additionally enter as condition that the **SecurePowerSwitch** shall only be switched off, if it detects that less than 70 watts are used after 5 p.m.

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Application example 4

Suppressing devices by an interruption in the power supply:

Short interruptions in the power supply, e.g. if a device in the network can no longer be addressed or if no function is available.

Example: Router monitoring:

Sometimes, no Internet connection is available. In order to remedy this problem, briefly switch the router off and on again. The **SecurePowerSwitch** can independently detect this fault and automatically execute an interruption in the power supply.





Settings:

First enter the IP addresses or the DNS names of the servers which are available on the Internet under "Target station". In this case, two reliable servers are used which should normally be available at any time. Even if one server is not available for a short time, there is no accidental switch function since the other server is still available. If there is a failure of the router, both servers are no longer available as described in this case. This will then result in the switch-over procedure "Off" and takes place as follows: (refer to the following page)

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	Ping		IP/DN	IS address			switching process		On		Off	
	remote sta	tion 1	google	e.de			signal + timeout(se	ec)	5		5	
	remote sta	tion 2	8.8.8.8	8			switching function		power up		power down	
	remote sta	tion 3					timeout(sec)		5		5	
	remote sta	tion 4					switching function		None	•	power up 🔻	
	remote sta	tion 5					ping continue(sec)		5		120	
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	2 🗹	power up	-	emote station 2 💌	5	sec	unreachable 🔻	3	times	cond	itional 💌 toggle	
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In order to check the function, the individual numbers of the conditions indicate the status of the test in colours.

- Green: The condition applies.
- Yellow: The condition applies; the test is not completed yet.
- **Red**: The condition does not apply.

Switch over process. PowerSwitch - Windows Internet Expl _ 🗆 🗵 🕒 🔿 🗢 🧟 http://akif6666 × 🔎 🖻 😽 🗙 🔏 PowerSwitch HPV1.5.9 Configuration English 💌 Configuration > Watchdog settings Ping settings Off Ping google.de 5 5 remote station 1 signal + timeout(sec) 8.8.8.8 switching function power up remote station 3 remote station 4 switching function None • power up 💌 ping continue(sec) 120 1 unreachable 💌 ▼ remote station 1 ▼ onal 👻 toggle 5 sec times condi • remote station 2 unreachable 💌 conditional - toggle sec times 3 🔲 • remote station 1 💌 • immediate 👻 toggle sec times remote station 1 -ediate 💌 toggle 5 sec times ▼ remote station 1 ▼ 5 immediate 💌 toggle sec times 6 🔲 • remote station 1 💌 immediate 👻 toggle 5 sec times • remote station 1 💌 • immediate 💌 toggle sec times remote station 1 💌 • 5 nmediate 💌 toggle sec • remote station 1 -immediate 👻 toggle 5 sec times 10 🔲 ▼ remote station 1 ▼ • immediate 💌 toggle 5 sec times

- 1.) You hear an acoustical signal in form of 3 short beeps.
- 2.) It is waited for 5 seconds.
- 3.) The relay switches off and the power supply is interrupted.
- 4.) It is waited for 5 seconds.
- 5.) The relay switches on again and the power supply is restored.
- 6.) It is waited for 2 minutes.
- 7.) The monitoring is restarted.

Note:

Enter a sufficient waiting time for "**Proceed ping**". After the interruption of the power supply it may be that your terminal (router) needs some time in order to restore the normal function or working capacity. If the time is too little, the **SecurePowerSwitch** switches off the power of the router before it was even possible to reach the indicated server.

Application example 5

Switching electrical devices via the Internet:

Example: Controlling the SecurePowerSwitch via the Internet.



Registration:

Register on the homepage <u>http://www.myopengate.com</u> and follow the instructions on the homepage.

in - Windows Internet Explorer				
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	Confirm Password			
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	I agree with Terms of Use ⁹			
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Note:

Do not use any special characters for the user name/account name and the password and pay attention to the using upper and lower case letters!

Configuration:

After the successful registration you have to enter the log-in data which were previously assigned during registration, such as user name/account name and the password in the **SecurePowerSwitch**. To do so, please connect your device to the **SecurePowerSwitch** via your browser and select the **menu Options** via the configuration. These log-in data are also stored there.

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Configuration > Options			English 💌	s A
maximum power 2	300 Watt		Clear values	
after reboot relais on				
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M2M Password	••••			
M2M Server a	kserver1.com			
AK-SecurePowerSu	witch	AK-NOR		
Switch of day to day of the set	Witch	AK-NOR		

M2M – Account name:TheM2M – Password:TheM2M – Server:Ente

The user name assigned in MyOpenGate. The password assigned in MyOpenGate. Enter the rendezvous server here. In this case "**akserver1.com**"

Note:

These functions are only activated after **restarting the system**. Do not use any special characters for the account name and the password and pay attention to the using upper and lower case letters!

Note:

Generally you do not need to reconfigure your router on site for this process. The whole log-in and the connection establishment is executed encrypted.

Remote control with the PC via the Internet:

Connect **your device again** under <u>http://myopengate.com</u> and log-in your account with your M2M access data.



Then select the **"Device list"** from the menu. All devices connected to this account are displayed. Then click on the corresponding device icon and you are immediately connected to the device.



From now on you are directly connected to your **SecurePowerSwitch**, e.g. at home. Of course, Since it is protected by access data, you have to enter the user name and the password of the **SecurePowerSwitch** here.

(refer to Determine password or Expert configuration)



Then you can switch the device on or off which is connected to the **SecurePowerSwitch**, read the current power consumption or change the settings.



AK-SecurePowerSwitch Manual

Remote control with the SmartPhone via the Internet:

Of course, you can directly access the **SecurePowerSwitch** over the Internet via SmartPhone or Pad.

2

Start the browser on your SmartPhone. Connect to the Internet site <u>http://</u><u>www.myopengate.com</u> and log in with your user data. Then click on the corresponding device icon and you are immediately connected to the device.



From now on you are directly connected to your <u>SecurePowerSwitch</u>, e.g. at home. Of course, since it is protected by access data, you have to enter the user name and the password of the <u>SecurePowerSwitch</u> here.



Then you can switch the device on or off which is connected to the SecurePower-Switch, read the current power consumption or change the settings.

3	www.myopengate.com/m/profile ×	4 Monitor Hand Monitor
	Authentifizierung erforderlich Für den Server http://akserver1.com:80 ist ein Nutzername und ein Passwort erforderlich. Der Server meldet Folgendes: protected area. Nutzername: Xt	$ \begin{array}{c} $
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