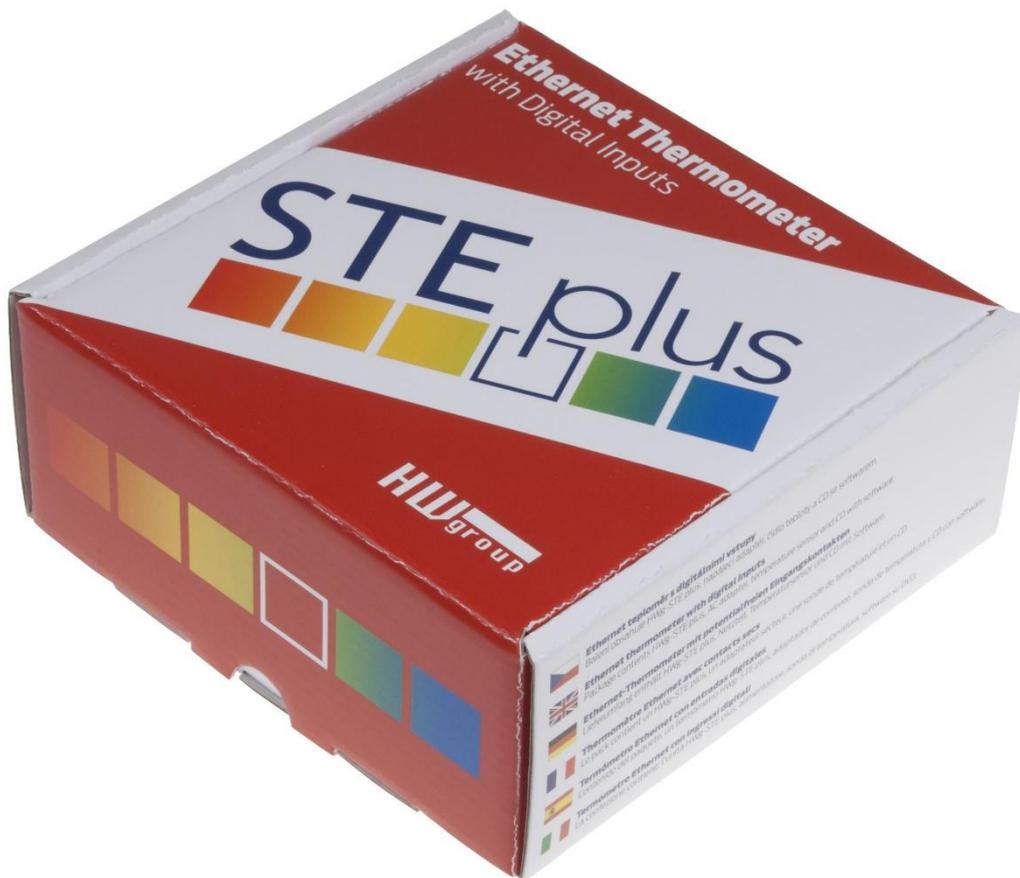


HWg-STE plus

HWg-STE plus PoE

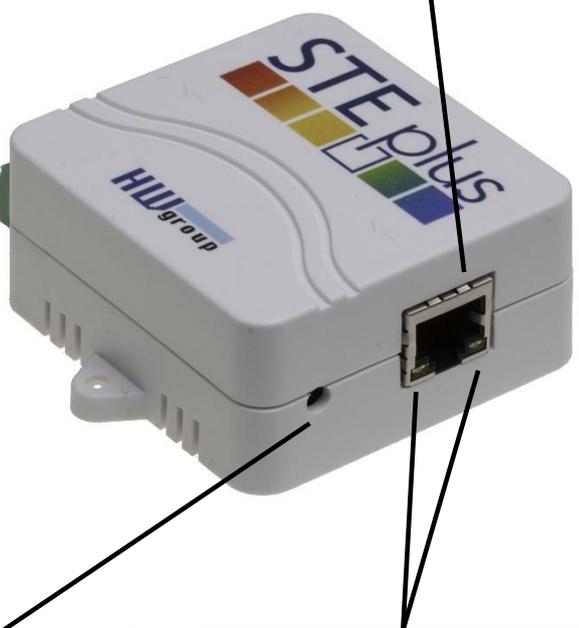
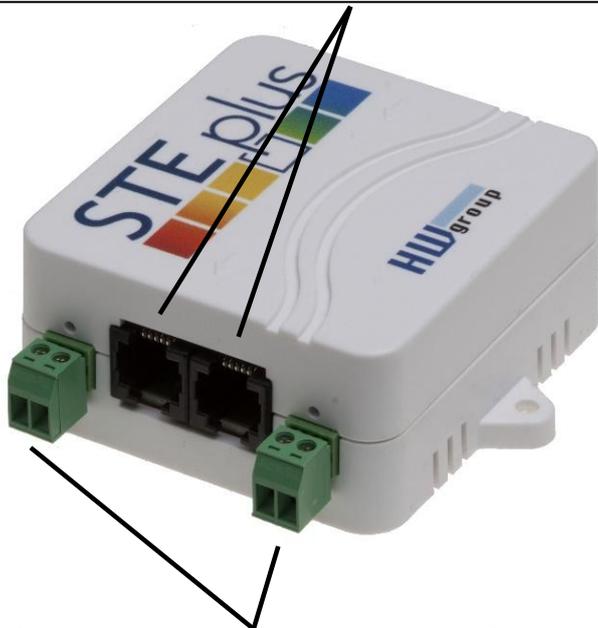
MANUAL



HWg-STE plus - connectors

SENSORS
 S1 and S2 ports for connecting temperature or humidity sensors.
 Max distance **60m for both sensors in total**

ETHERNET
 100 Mbps
 *) PoE power only for "HWg-STE PoE"



Digital Inputs
 2x Digital input with LED signalization for connecting dry contact, door contacts or relay outputs.

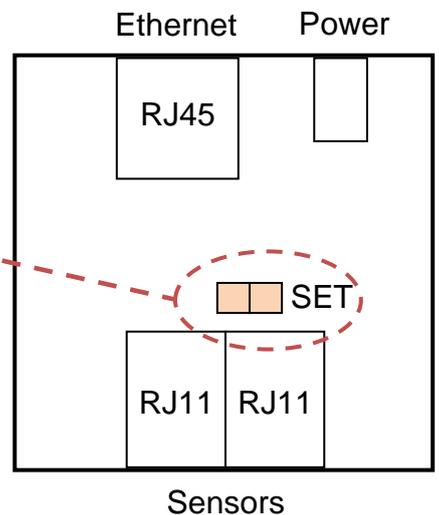
POWER input
 5V DC power supply
 Use the supplied power adapter

LED indicators
 Green: Power & Mode
 Yellow: Link & Activity

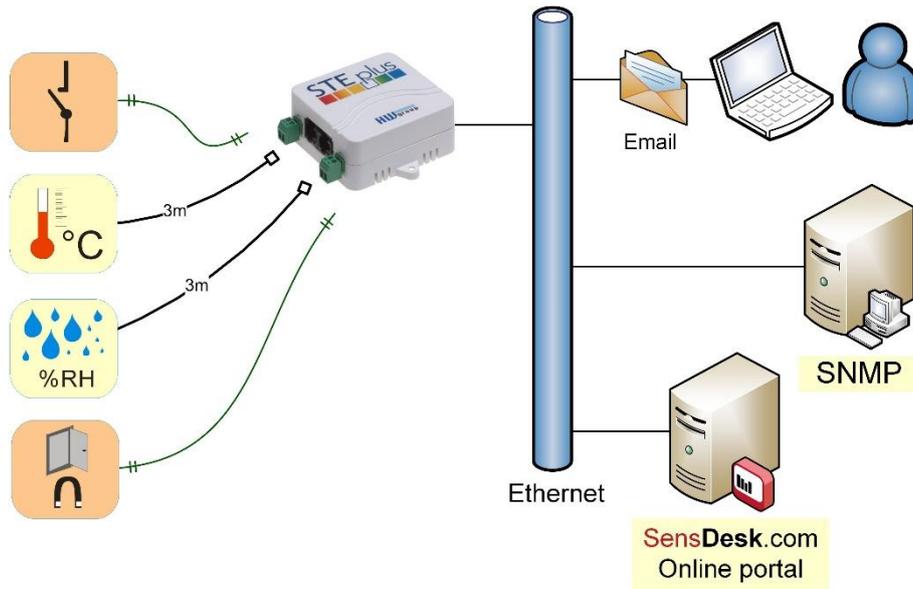
Setting the device to its factory default

- 1) Turn the device off – unplug the power adapter.
- 2) Open the unit and set the marked jumper.
- 3) Turn on the device for 30 seconds only (to set the device back to defaults).
- 4) Turn off the device
- 5) Remove the jumper set in step 2
- 6) Turn on the device. Factory defaults settings is restored

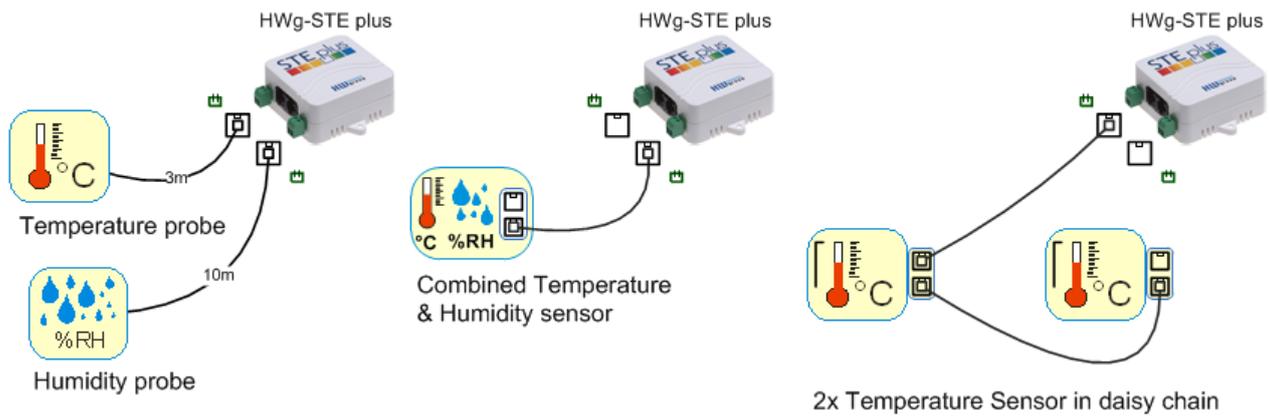
JUMPER for restoring factory default settings
 DO NOT KEEP THE JUMPER PERMANENTLY SET!



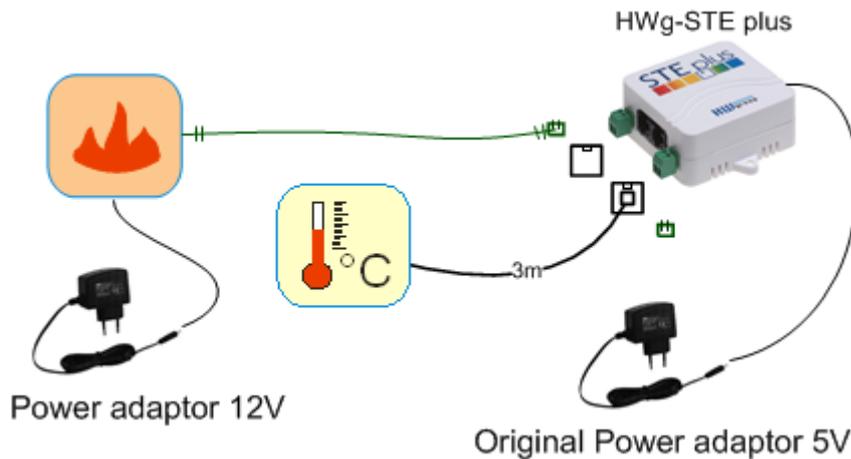
Recommended connection options



Sensors connection options:



Smoke sensor connection:



First steps

1) Connecting the cables

- Connect the unit to the Ethernet (patch cable to a switch, or a cross-over cable to a PC).
- Plug the power adapter in to a power outlet and connect it to the HWg-STE plus power connector.
- The green **Power & Mode** LED in the RJ45 connector lights up.
- If the Ethernet connection works properly, the **LINK** (yellow) LED lights up after a short while, and then flashes whenever data transfer takes place (activity indication).
- After power up, the **LINK** LED flashes rapidly to indicate IP address negotiation over DHCP.

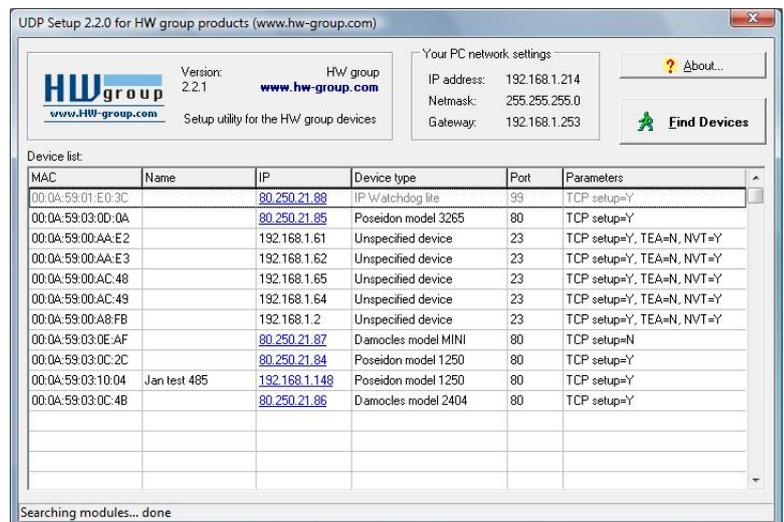
2) Configuring the IP address – UDP Config

UDP Config utility – root directory of the supplied CD (Windows and Linux versions). Available for download at www.HW-group.com

Software > **UDP Config**.

- Click the icon to launch **UDP Config**. The program automatically looks for connected devices.
- To search for devices, click the **Find Devices** icon.

The program looks for devices on your local network. Double-click a MAC address to open a basic device configuration dialog.



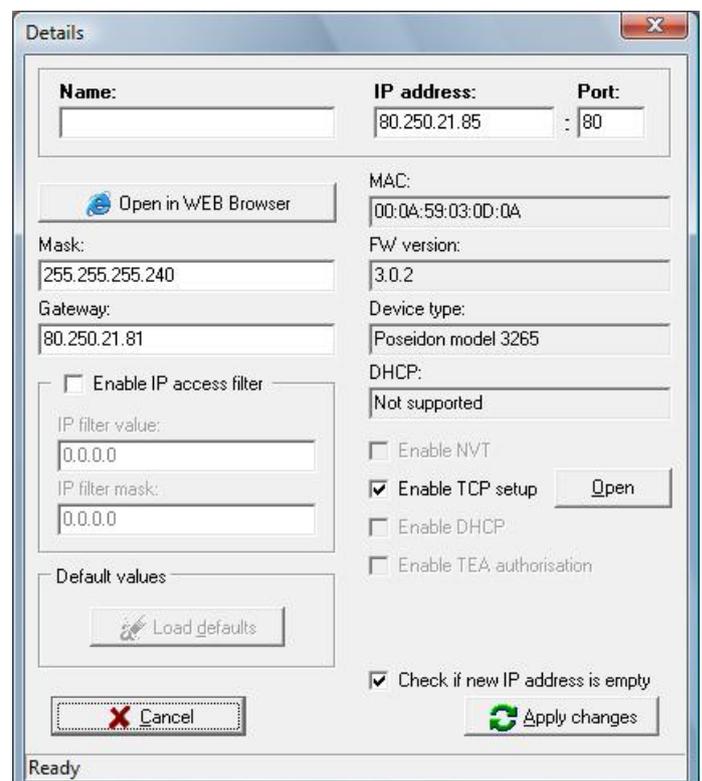
Configure network parameters

- IP address / HTTP port (80 by default)
- Network mask
- Gateway IP address for your network
- Device name (optional)

Click the **Apply Changes** button to save the settings.

Restoring factory defaults

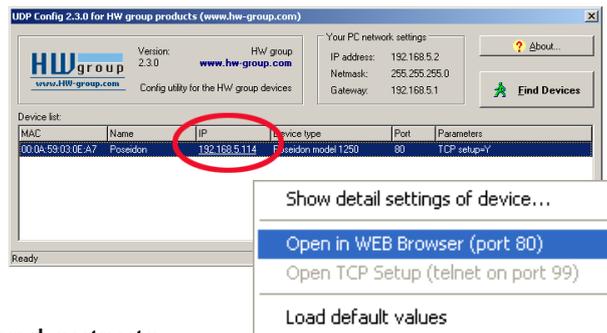
- Right-click on the device MAC address and select "Load default values". Within 60 seconds after powering up the unit, factory defaults can be restored using UDP Config.
- Disconnect the power jack, connect the jumper near the RJ11 sockets, power up the device and wait 15 seconds. Then, disconnect the power and disconnect the jumper. The device is ready in its factory default configuration.



First steps

3) WWW interface of the device

- To open the WWW interface of the device:
 - Enter the IP address into a web browser
 - Click the IP address in UDP Config
 - Click the underlined IP address in UDP SETUP
- The WWW page displays current states of inputs and outputs.



Device IP address

IP address / DHCP setup

Outgoing e-mail parameters

Sensors settings

Sensors overview

User-defined text for service purposes.

Current sensor reading

Base Information	
Device Name	HWg-STE Plus
Time	12:29:48
Date	22.07.2013

Sensors			
State	Name	Type	Current Value
	Sensor 6313	Humidity	30.6 %RH
	Sensor 7313	Temp.	29.5 °C
NORMAL	Input 1	Input Dry Contact	1 (Closed)
NORMAL	Input 2	Input Dry Contact	0 (Open)

Portal Message

SensDesk.com: [Check sensor online.](#)

You can see this page even in [Mobile](#) version.

HWg-STE Plus :For more information try www.hw-group.com

Device configuration

HWg-STE Plus: Ethernet thermostat

Home | Graph | **General Setup** | SNMP | Email | Time | Inputs | Sensors

General Setup

User-defined footer. For example, administrator's contact details

Device name
Identifies the device in e-mails and SNMP

Base		
Name	Value	Description
Device Name	HWg-STE Plus	0 to 16 characters
WWW Info Text	HWg-STE Plus :For more information try www.hw-group.com	
Temperature unit	Celsius	Celsius/Fahrenheit/Kelvin
Periodic restart	Off	Periodic restart time
Web refresh	1 [s]	Automatic refresh period of web page.
Save		

Network		
Name	Value	Description
DHCP	<input checked="" type="checkbox"/>	DHCP Enable/Disable
IP Address	192.168.3.20	A.B.C.D
Network Mask	255.255.252.0	A.B.C.D
Gateway	192.168.1.254	A.B.C.D
DNS Primary	192.168.1.253	A.B.C.D
DNS Secondary	192.168.1.250	A.B.C.D
HTTP Port	80	Default 80
Save		

Security: Device Admin		
Name	Value	Description
Username		Admin username/password for device configuration changes [0 to 16 characters]
Password		
Save		

HWg-STE Plus :For more information try www.hw-group.com

Temperature unit, for display and alarm inputs

Password for configuration access

The configuration password is required for every page except the main page. Without entering the password, it is then possible to read the current connected sensors values.

SNMP

HWg-STE Plus: Ethernet thermometer

Graph | General Setup | **SNMP** | Email | Time | Inputs | Sensors | Portal | System

SNMP

General SNMP Settings

Name	Value	Description
System Name	HWg-STE Plus	0 to 16 characters
System Location		0 to 16 characters
System Contact	HWg-STE Plus :For more information try http://www.hw-group.com	
SNMP port	161	Default port 161

SNMP Access

Community	Read	Write	Enable
public	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
private	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Save

[Download MIB file](#), [Show OID keys table](#)

HWg-STE Plus :For more information try www.hw-group.com

Email

HWg-STE Plus: Ethernet thermometer

Graph | General Setup | SNMP | **Email** | Time | Inputs | Sensors | Portal | System

Email

Email Settings

Name	Value	Description
SMTP Server	some.smtp.server	IP Address or DNS Name
SMTP Port	25	Default 25
Authentication	<input type="checkbox"/>	Enable/Disable
Username		0 to 32 characters
Password		0 to 32 characters
Importance	Normal	Email importance flag
FROM	user@domain.com	Device email address
Subject	subject	Beginning of email subject
TO	recipient@domain.com	Email Recipient
CC		Email Copy

Save

Send Test Email

Test

HWg-STE Plus :For more information try www.hw-group.com

Time

HWg-STE Plus: Ethernet thermometer

[Home](#) | [Graph](#) | [General Setup](#) | [SNMP](#) | [Email](#) | [Time](#) | [Inputs](#) | [Sensors](#) | [Portal](#) | [System](#)

Time

SNTP Setup		
Name	Value	Description
SNTP Server	<input type="text" value="europe.pool.ntp.org"/>	IP Address or DNS Name
Time Zone	<input type="text" value="+1"/>	Number -12 ... +13
Summertime	<input checked="" type="checkbox"/>	last Sun Mar 2:00 - last Sun Oct 2:00
Interval	<input type="text" value="1h"/> <input type="button" value="v"/>	Sync period: Off/1h/24h
<input type="button" value="Save"/>		

SNTP synchronize	
<input type="button" value="Sync"/>	

Time Setup		
Name	Value	Description
Time	<input type="text" value="12"/> : <input type="text" value="52"/> : <input type="text" value="27"/>	hh:mm
Date	<input type="text" value="22"/> . <input type="text" value="07"/> . <input type="text" value="2013"/>	DD.MM.YYYY
<input type="button" value="Save"/>		

HWg-STE Plus :For more information try www.hw-group.com

Digital Inputs

HWg-STE Plus: Ethernet thermometer

[Home](#) | [Graph](#) | [General Setup](#) | [SNMP](#) | [Email](#) | [Time](#) | [Inputs](#) | [Sensors](#)

Inputs

Input Dry Contact						
ID	Current State	Name	State Name		Alarm Alert	Email
			Log 0	Log 1		
1	1 <i>(Closed)</i>	<input type="text" value="Input 1"/>	<input type="text" value="Open"/>	<input type="text" value="Closed"/>	<input type="text" value="Disabled"/> <input type="button" value="v"/>	<input type="checkbox"/>
2	0 <i>(Open)</i>	<input type="text" value="Input 2"/>	<input type="text" value="Open"/>	<input type="text" value="Closed"/>	<input type="text" value="Disabled"/> <input type="button" value="v"/>	<input type="checkbox"/>
<input type="button" value="Save"/>						

Log0, Log1 state names.
For example - fuel tank Full/Empty or front door Open/Closed.

Digital Input ID

Alarm settings (active/disabled)

Sends an email in case of alarm if ticked

HWg-STE Plus :For more information try www.hw-group.com

Sensors

HWg-STE Plus: Ethernet thermometer

Home | Graph | General Setup | SNMP | Email | Time | Inputs | **Sensors** | Ports

Sensors

Sensor list									
State	ID	Type	Name	Current Value	Safe Range	Hysteresis	Email	Sensor Serial Code	Del.
✔	6313	Humidity	Sensor 6313	30.6 %RH	30.0 ~ 80.0	10.0	<input type="checkbox"/>	26a91800590a00fb	
✔	7313	Temp.	Sensor 7313	29.8 °C	10.0 ~ 60.0	1.0	<input type="checkbox"/>	28911c00590a00d7	

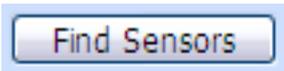
Save Find Sensors [delete all](#)

more information try www.hw-group.com

Inactivity period before and after each alarm

Safe Range - device sends an email when this threshold is exceeded

Deletes the sensor from the list



- Scans for changes in connected sensors

Note:

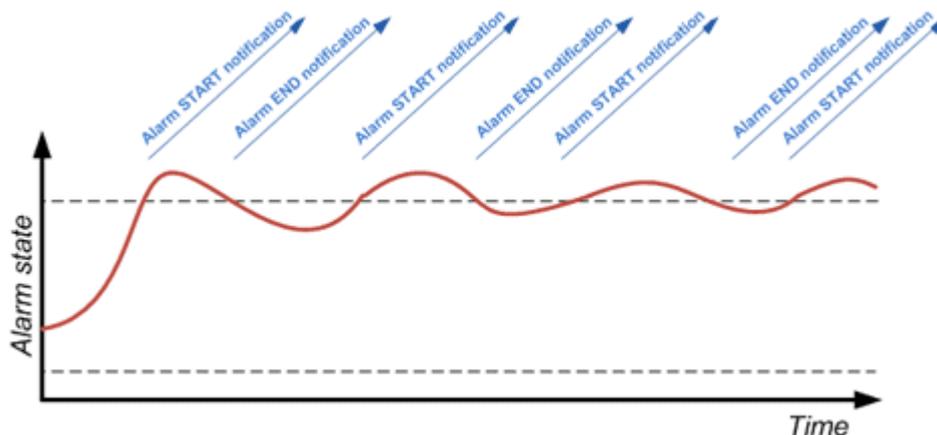
After connecting a new sensor or exchanging an existing one, always click **Find Sensors**.

Hysteresis

Hysteresis prevents receiving tens and hundreds of alarm messages about start and ending of alarm while the value oscillates around the Safe Range threshold.

Set the value in °C or %RH, mostly using 1 to 4°C or approximately 5 %RH is enough.

You can find more on HWg websites in “AN35: Poseidon – Preventing false alarms”:



Portal

HWg-STE Plus: Ethernet thermometer

[Home](#) | [Graph](#) | [General Setup](#) | [SNMP](#) | [Email](#) | [Time](#) | [Inputs](#) | [Sensors](#) | [Portal](#) | [System](#)

Portal

Portal Message

SensDesk.com: Check sensor online.

Portal config

Name	Value	Description
Portal	<input checked="" type="checkbox"/>	Portal Enable/Disable
Push Period	10 [s]	Time in Sec, 0 = Disable
Pop Period	0 [s]	Time in Sec, 0 = Disable
Server Address	http://sensdesk.com/portal.php	IP Address or DNS Name
IP Port	80	Default 80
Username	<input type="text"/>	Portal username and password [0 to 16 characters]
Password	<input type="text"/>	

Input(s) autopush config

ID	Name	Current Value	Autopush
1	Input 1	1 (Closed)	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
2	Input 2	0 (Open)	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

Sensor(s) autopush config

ID	Name	Current Value	Autopush Delta
6313	Sensor 6313	30.6 %RH	2.0
	Sensor 7313	29.8 °C	2.0

Portal communication status

Target portal settings with login details

AutoPush function and sensitivity settings (delta – value change)

HWg-STE Plus :For more information try www.hw-group.com

Portal function periodically sends data to a remote server. Sending period depends on the time set on a server that operates the portal.

AutoPush is a function allowing sending of measured data in case of value increase/decrease larger than AutoPush delta parameter.

Graph

HWg-STE Plus: Ethernet thermometer

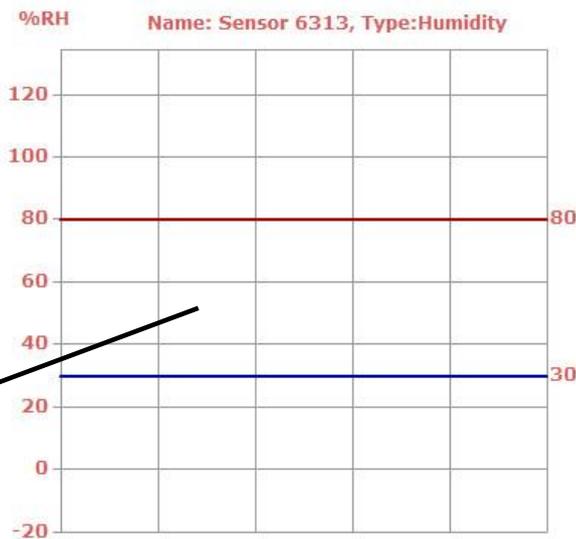
[Home](#) | [Graph](#) | [General Setup](#) | [SNMP](#) | [Email](#) | [Time](#) | [Inputs](#) | [Sensors](#) | [Portal](#) | [System](#)

Graph

Graph Setup		
Name	Value	Description
Graph source	Sensor 6313	
Period	900 [s]	Time in Second, 0 = Disabled

Choose a sensor to show its graph. Values are stored on RAM memory

Graph actualization period (s)



Graph of the measured values. Mouse-over to show the time and value at the point

Safe range threshold set for the sensor

The next reload in 898 seconds.

HWg-STE Plus :For more information try www.hw-group.com

System

HWg-STE Plus: Ethernet thermometer

[Graph](#) | [General Setup](#) | [SNMP](#) | [Email](#) | [Time](#) | [Inputs](#) | [Sensors](#) | [Portal](#) | [System](#)

Text list of most frequent SNMP variables

SNMP MIB

System

Download	
Description	File
Backup configuration	HWg-STE_Config.bin
Online values in XML	values.xml
SNMP MIB Table	HWg-STE.mib
TXT list of common SNMP OIDs	HWg-STE_OID.txt

System	
Name	Value
Version	2.0.1a
Compile time	Jul 22 2013, 12:31:38
Build	8633
Vendor ID	0
UpTime	2 min
Demo Mode	Demo Mode Enable
Upload Firmware or Configuration	<input type="button" value="Procházet..."/> <input type="button" value="Soubor nevybrán."/> <input type="button" value="Upload"/>

Factory Default	System Restart
<input type="button" value="Default"/>	<input type="button" value="Restart"/>

Firmware update

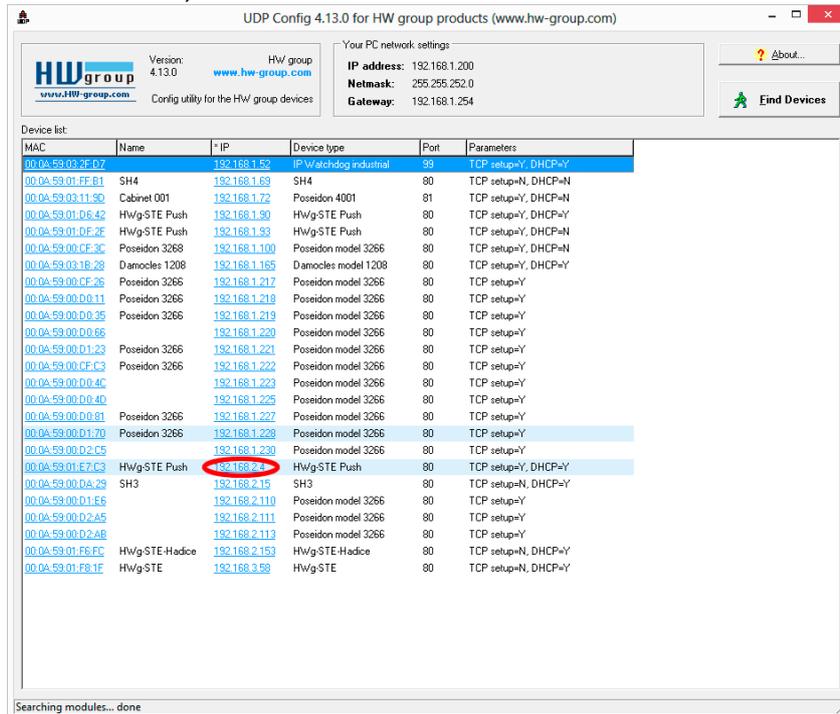
HWg-STE Plus :For more information try www.hw-group.com

Technical specifications

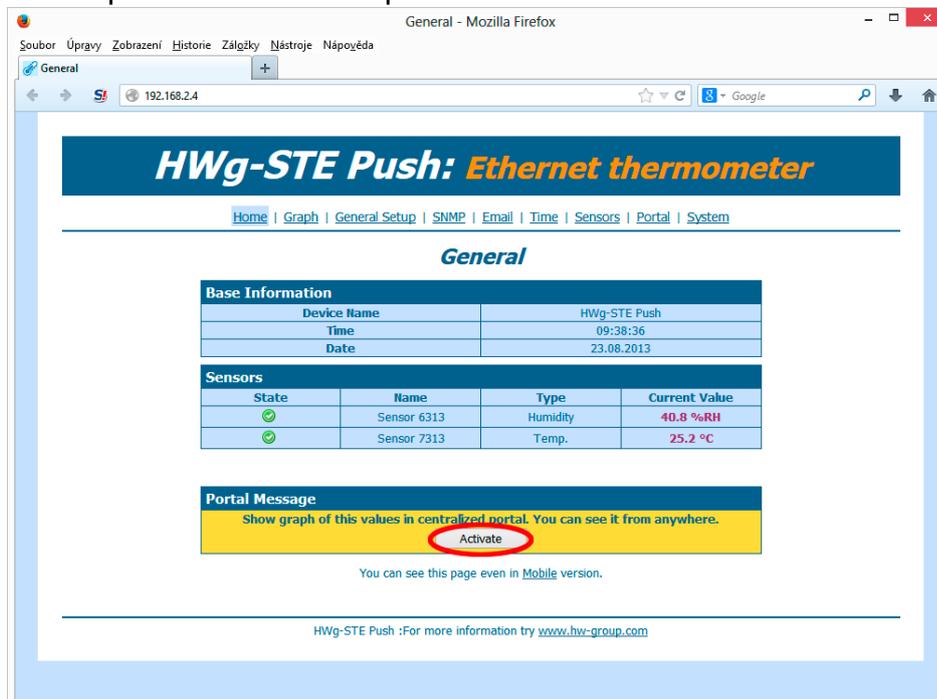
ETHERNET	
Interface	RJ45 (10/100BASE-T)
Supported protocols	IP: ARP, TCP/IP (HTTP, SNMP, SMTP, HWg-Push), UDP/IP (SNMP)
SNMP	Version1 fully supported, partially Version2
EXTERNAL SENSORS	
Port / connector	S1, S2 / RJ11 (1-Wire)
Can connect	Two external temperature or humidity sensors. One combined temperature and humidity sensor
Sensor types	Only HW group s.r.o. sensors
Sensors / range	Max 2 sensors / Max 60m in total for both sensors
DIGITAL INPUTS (Dry Contact Inputs)	
Port / connector	I1, I2 / socket clamp \varnothing 2mm
Type	Digital Input (supports NO/NC Dry contact)
Sensitivity	1 (On) = 0-500 Ω (Right pin on the terminal block can be connected to 12V GND)
Max. distance	Up to 50m
Power Supply	
Power Supply	5V DC / 250 mA
Connector	Jack \varnothing 3.5 x 1.35 / 10 [mm]
PoE (Power over Ethernet)	RJ45 - IEEE 802.3af (only with "HWg-STE plus PoE" version)
LED	
POWER / status	Green - power OK (status = DHCP/Local alarm)
LINK & Activity	Yellow - Ethernet connectivity
JUMPER	
SET	Load defaults: Power-on with jumper ON for 30 seconds, switch off and remove jumper
Other parameters	
Operating temperature	-10 to 60 °C (operating temperature range does not have to correspond with sensors range)
Dimensions / Weight	65 x 80 x 30 [mm] / 500 g
EMC	CE / FCC Part 15, Class B
	EN 55022, EN 55024, EN 61000

Connecting HWg-STE plus and STE Push to SensDesk portal

- 1) Connect the device to your network and set the network parameters (First Steps chapter in the user manual).



- 2) Then open the WWW setup of the device:



3) On the Home tab, click the **Activate** button in Portal Message section.

Portal Message

SensDesk.com: register your IP sensor.

Portal config

Name	Value	Description
Portal	<input checked="" type="checkbox"/>	Portal Enable/Disable
Push Period	10 [s]	Time in Sec, 0 = Disable
Log Period	0 [s]	Time in Sec, 0 = Disable
Server Address	http://sensdesk.com/portal.php	IP Address or DNS Name
IP Port	80	Default 80
Username	<input type="text"/>	Portal username and password [0 to 16 characters]
Password	<input type="text"/>	

Sensor(s) autopush config

ID	Name	Current Value	Autopush Delta
6313	Sensor 6313	40.7 %RH	2.0
7313	Sensor 7313	25.3 °C	2.0

Save Manual Push

HWg-STE Push :For more information try www.hw-group.com

4) This will get you to a *Portal* tab and at the same time the portal function will be activated. By clicking the link **SensDesk.com: register your IP sensor** a login window on www.Sensdesk.com will be show:

SensDesk IP sensors portal

Address: 192.168.2.4 Port: 80

Username: Password: Popis:

ID	State	Sensor Name	Hodnota	Unit	Activity
578	✓	Sensor 6313	40.2	%RH	1 sec ago
579	✓	Sensor 7313	25.3	°C	1 sec ago

Sensors with unit %RH

40.2

30.2

20.1

10.1

0

23.08.09:41

Sensors with unit C

25.3

■ Sensor 7313

SensDesk IP sensors portal

Username * Password *

Register to Portal reset password or Log in

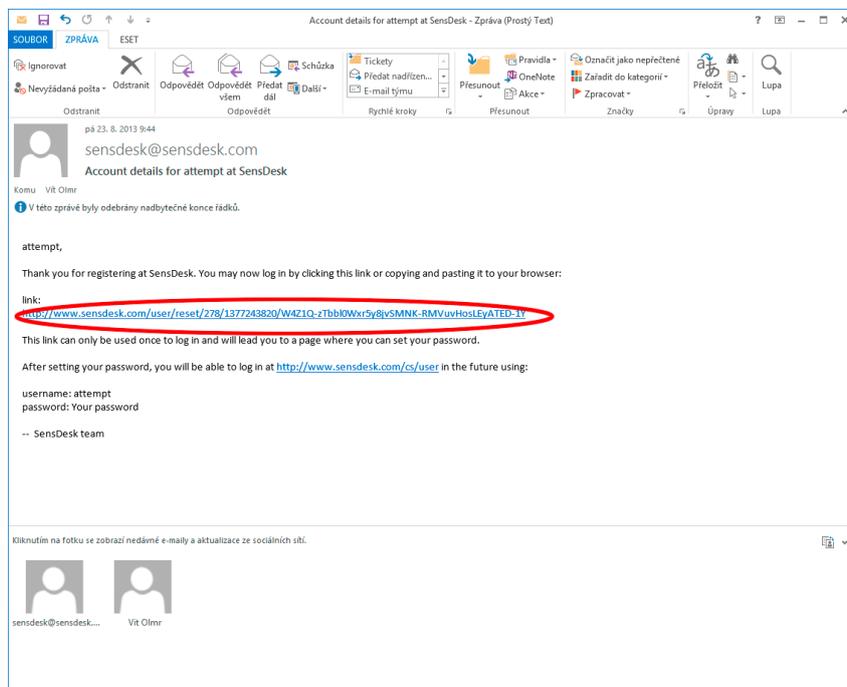
- 5) In case you already have a user account, please enter your login details and the device will be automatically assigned to your account.

In case you do not have a SensDesk account yet, click the *Register to Portal* link and a registration form will be shown.:

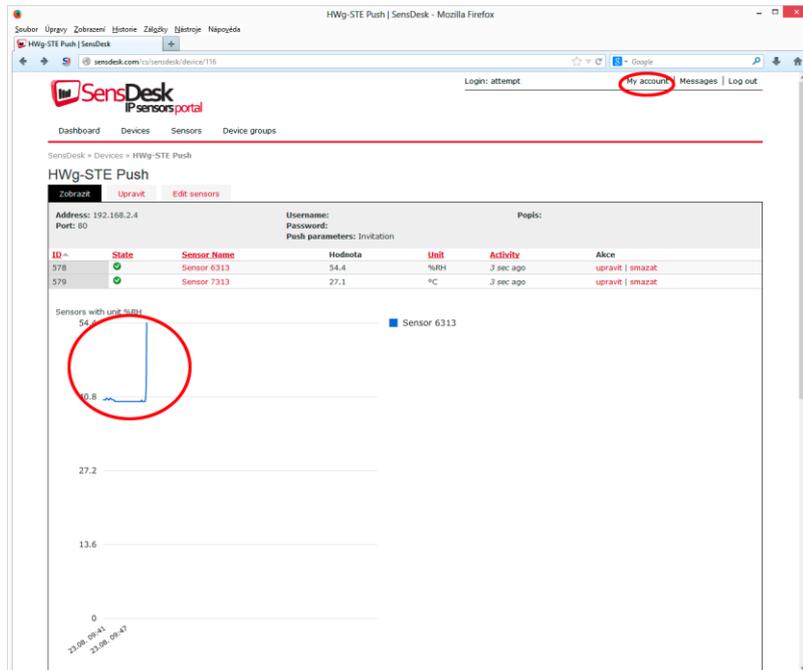
- 6) Enter the login details for your new account and a correct e-mail address. **E-mail address** has to be unique for the server (cannot be already registered under another account).

Company name field allows you to create your own 3rd level domain (usually *company.sensdesk.com*). A user name will be used if the Company name field is left empty.

After clicking **Create new account** button, a user account will be created and at the same time a confirmation email is sent to the entered e-mail address. This e-mail contains a confirmation link which has to be used in order to activate the account:

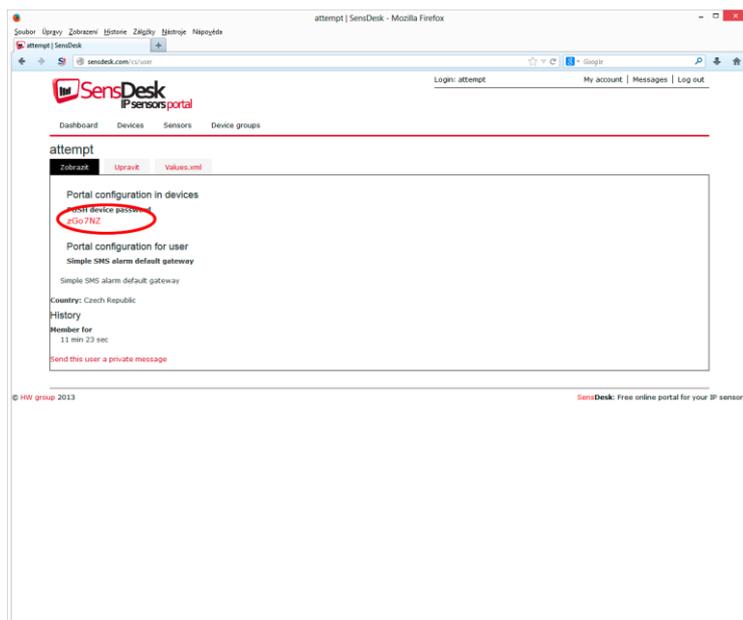


- 7) By activating the account, you will be redirected to the **Invitation page**. At this moment, the data sending period is set to 10 seconds to show the sensors functionality. This page is active only for approximately 15 minutes after the activation, then the logging period changes to 15 minutes.

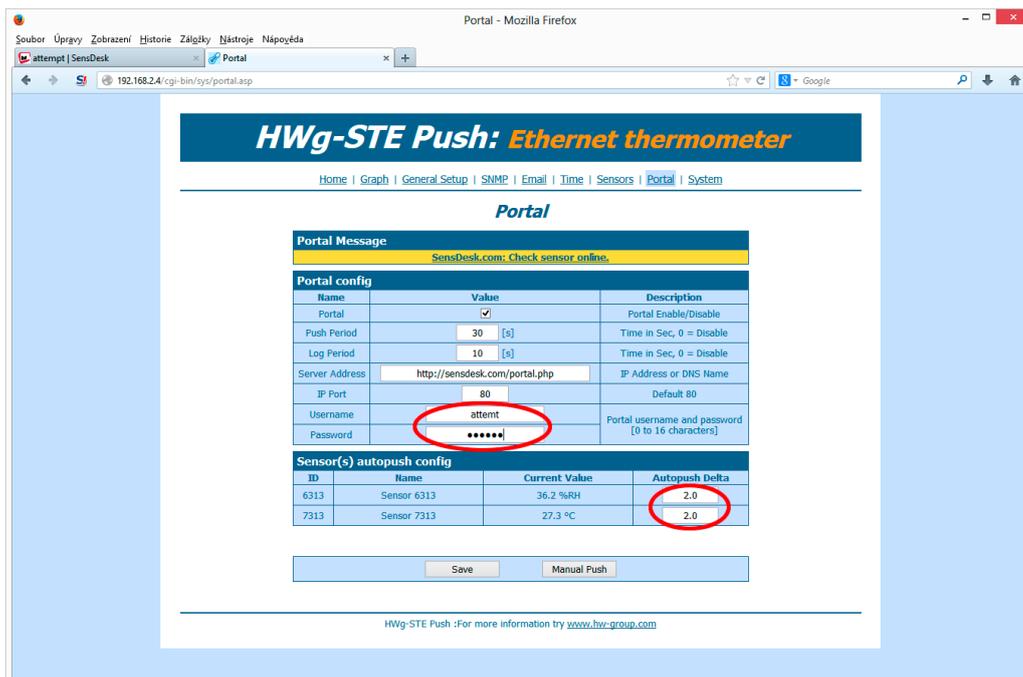


In your user account configuration (**My Account** link), you can find your **Push Device Password**. This password, together with your login name, identifies the device in communication with your account and in communication of mobile applications with SensDesk.

The password cannot be changed and for a security reason it is different to the login password.

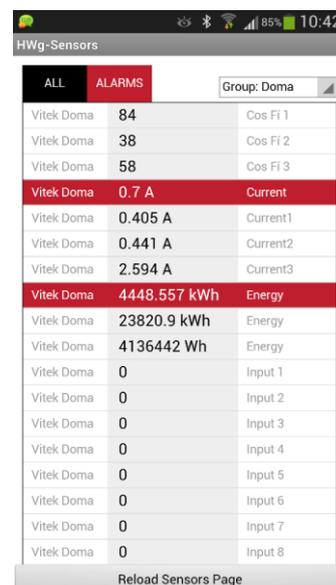


PUSH Device Password can be used in devices to skip the logging procedure during assigning a device to your portal account without going through the logging process.



Using the mobile phone Application

Username and PUSH Device Password can be used also for setting the mobile application:



Contact details

HW group s.r.o

Rumunská 26 / 122
Praha 2, 120 00

Tel. +420 222 511 918
Fax. +420 222 513 833

<http://www.HW-group.com>



