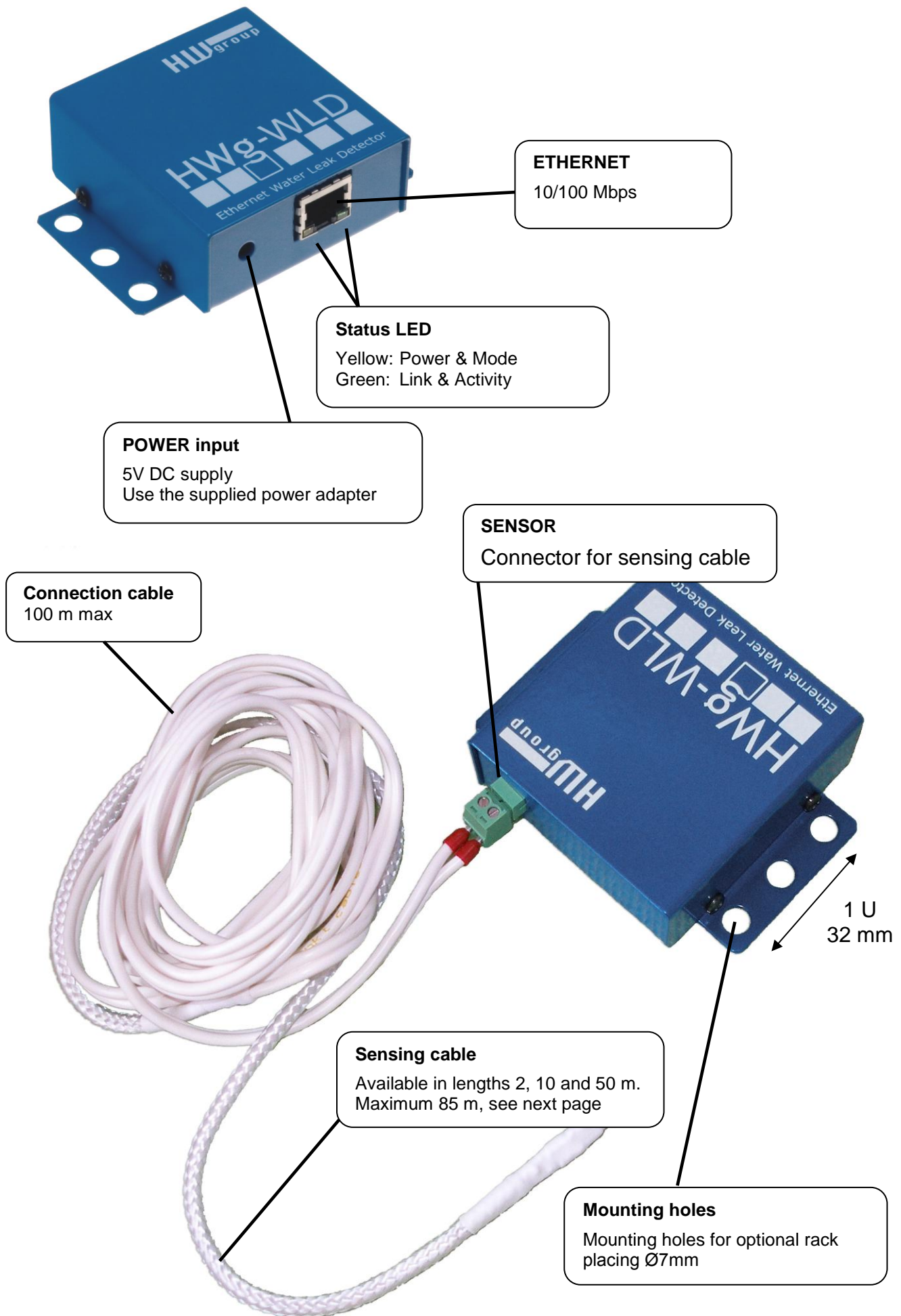


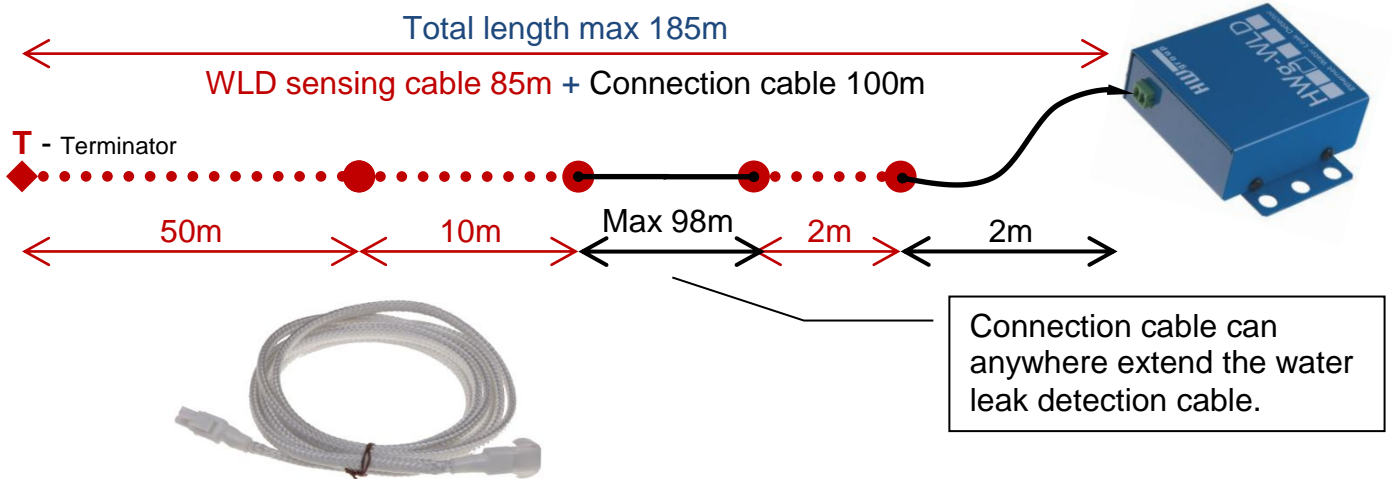
HWg-WLD MANUAL





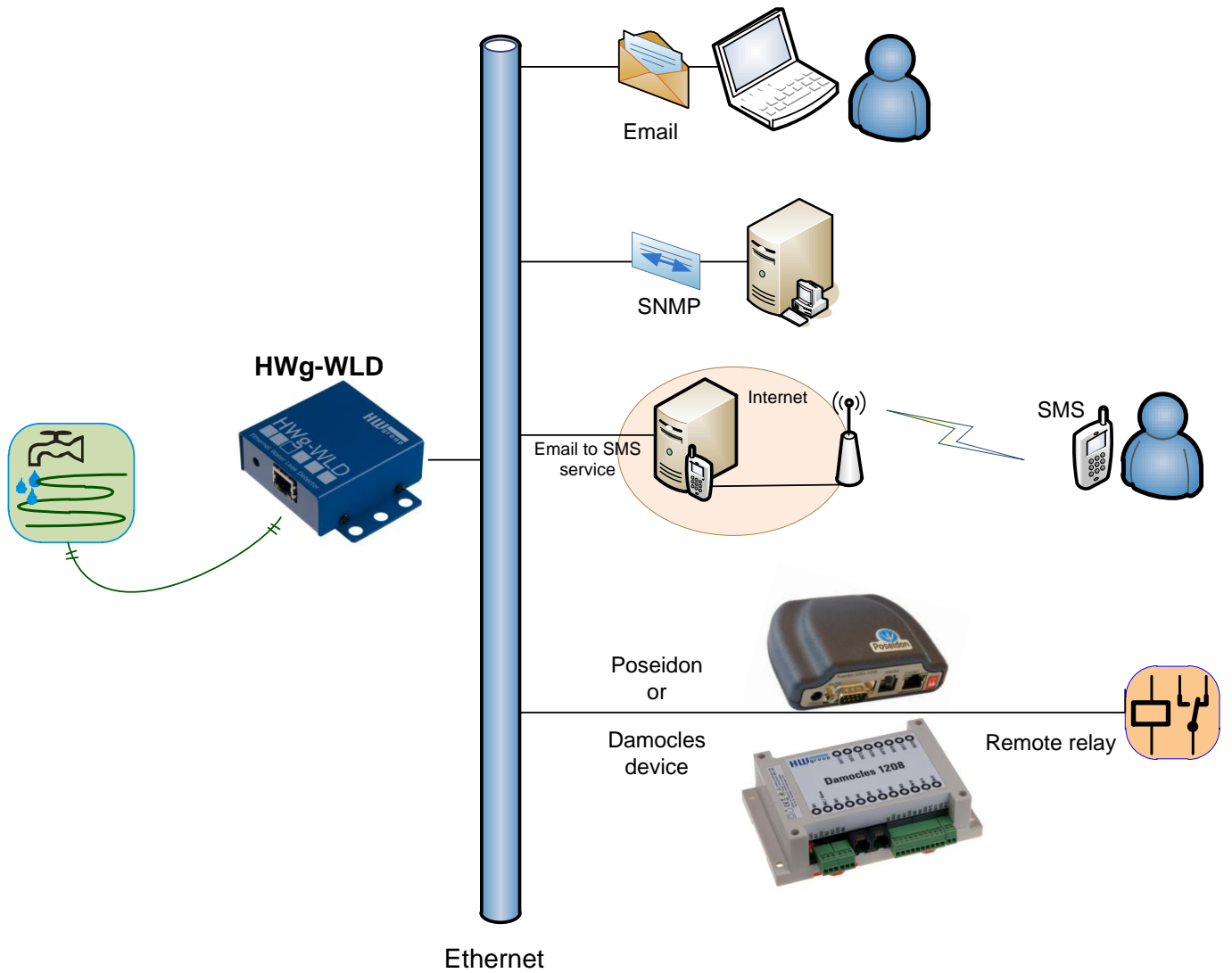
Order the water leak detecting cable in length you need

- **WLD A connection cable 2m** (HWg-WLD connection cable + Terminator)
- **WLD sensing cable A - 2m**
- **WLD sensing cable A - 10m**
- **WLD sensing cable A - 50m**



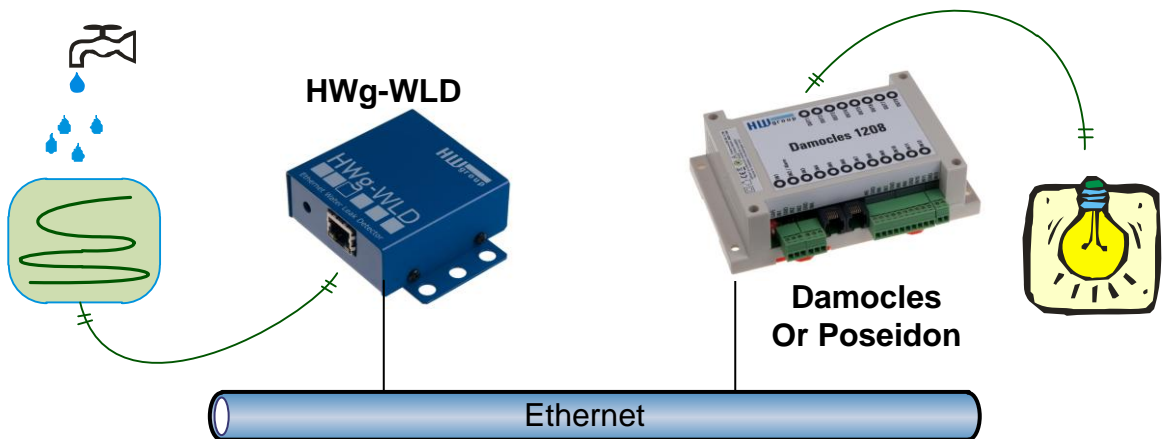
OID	Description
600 417	WLD sensing cable A - 2+2m Water leak detection cable pack. Connection cable 2m (600464) and 2m of Detection cable (600418). Total length is 4 m (13 ft): 2 m (6.5 ft) leader cable + 2 m (6.5ft) sensing cable, terminated.
600 467	WLD sensing cable A - 2+10m Water leak detection cable pack. Connection cable 10m (600465) and 10m of Detection cable (600465). Total length is 12 m (40 ft): 2 m (6.5 ft) leader cable + 10 m (33 ft) sensing cable, terminated
600 468	WLD sensing cable A - 2+50m Water leak detection cable pack. Connection cable 10m (600465) and 50m of Detection cable (600466). Total length is 52 m (170,5 ft): 2 m (6.5 ft) leader cable + 50 m (164 ft) sensing cable, terminated.
600 496	WLD A prolong cable 5m Prolong non sensitive cable 5m for WLD type A cable. Can be extended up to 100m in total.
600 464	WLD A connection cable 2m Leader cable 2m for connection HWg-WLD to detection cable type "A". Terminator included.
600 418	WLD sensing cable A - 2m Water Leak Detection sensing cable. Water leakage detected along the entire length of the sensing cable. Sensing cable can be extended by other piece of sensing cable. To connect with "HWg-WLD" or "HWg-WLD Relay" the Connection cable 600 464 is required.
600 465	WLD sensing cable A - 10m Water Leak Detection sensing cable. Water leakage detected along the entire length of the sensing cable. Sensing cable can be extended by other piece of sensing cable. To connect with "HWg-WLD" or "HWg-WLD Relay" the Connection cable 600 464 is required.
600 466	WLD sensing cable A - 50m Water Leak Detection sensing cable. Water leakage detected along the entire length of the sensing cable. Sensing cable can be extended by other piece of sensing cable. To connect with "HWg-WLD" or "HWg-WLD Relay" the Connection cable 600 464 is required.

HWg-WLD usage



Switch Remote Relay over the network

*You can switch on remote alarm signal if water detected over the network.
Details on the last page of starting guide section.*



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-WLD 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 – see root directory of the supplied CD (Windows and Linux versions).

Alternatively download from www.HW-group.com

Software > **UDP Config**.

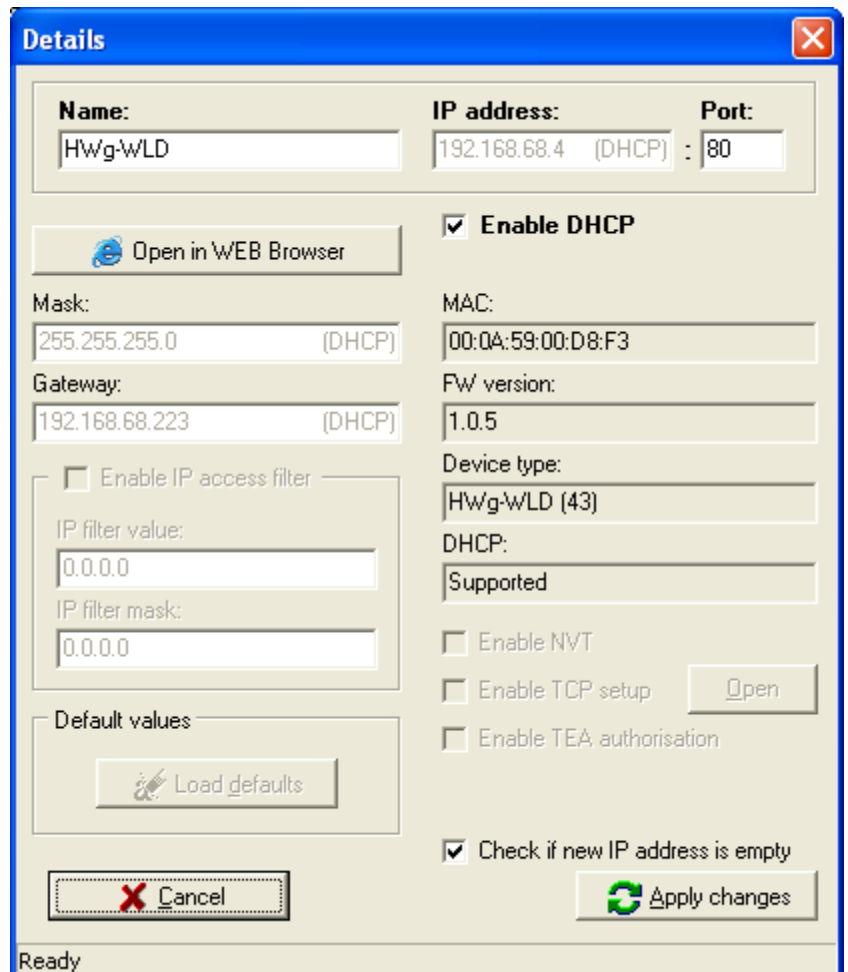
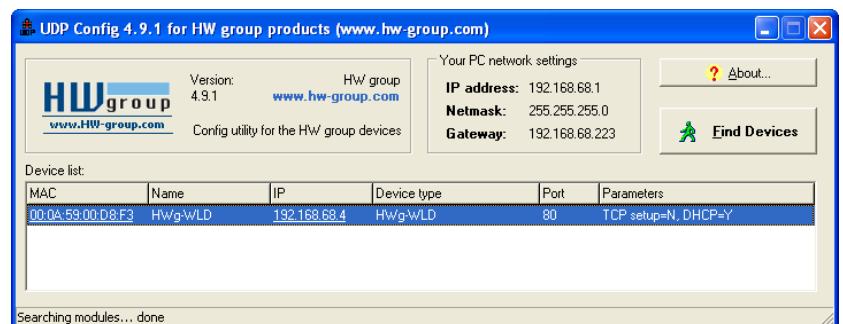
- Click the icon to launch **UDP Config**. The program automatically looks for connected devices.
- To search for devices, click the **Find Devices** icon.

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

Configure network parameters

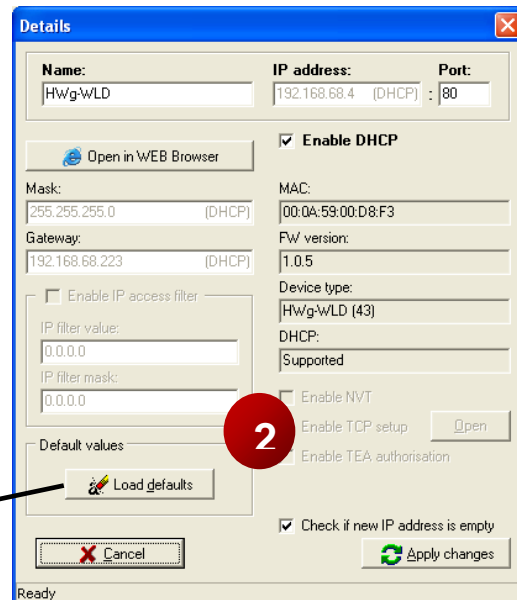
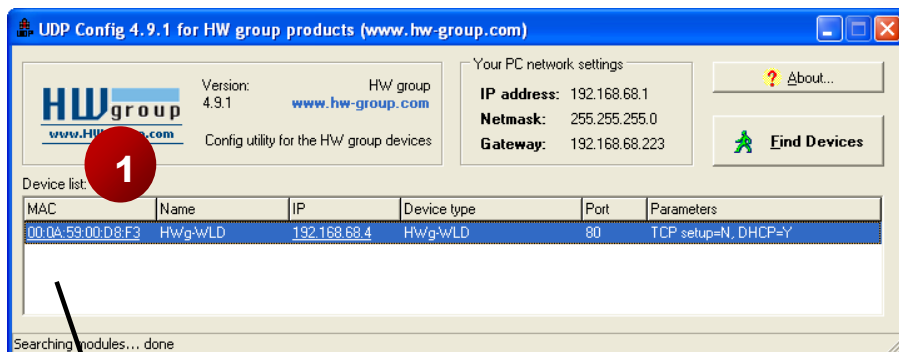
- IP address / HTTP port (80 by default)
- Network mask
- Gateway IP address for your network
- Device name (optional)

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



First steps

Restoring software factory defaults



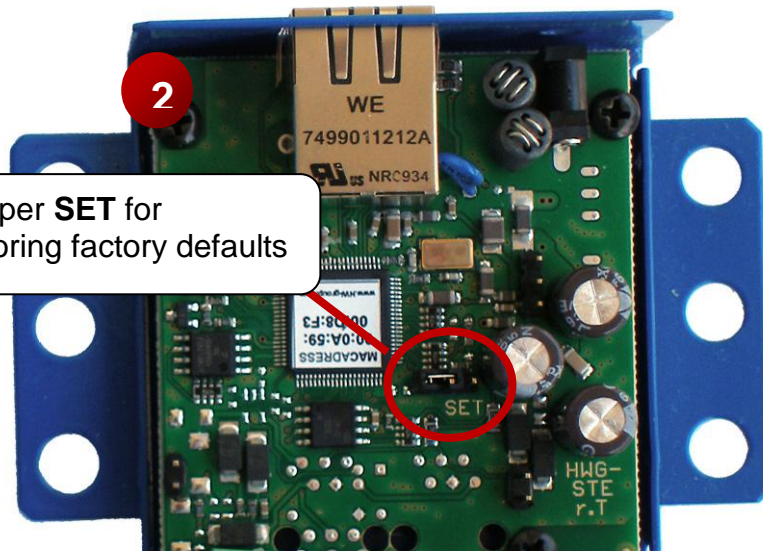
In **UDP Config** click a device **MAC** address within **60 seconds** after powering up the unit

Click button **Load defaults** to restore factory defaults.

Restoring hardware factory defaults



Remove cover of device.



Jumper **SET** for restoring factory defaults

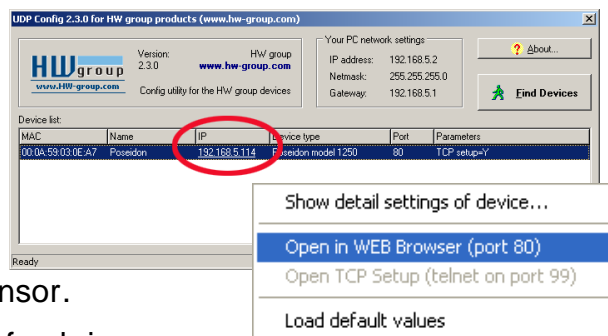
With the jumper in place, factory defaults are restored within 15 s after powering up. Remove the jumper afterwards.

DO NOT LEAVE THE JUMPER IN PLACE PERMANENTLY!

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 underlined IP address in UDP Config
- The WWW page displays current states of leak sensor.
- Home page is refreshed periodically, no manual refresh is required.



IP address of device

Device name and current date/time optionally synchronized by NTP server

Setting toolbar

General - Mozilla Firefox
http://192.168.1.20/

HWg-WLD: Water Leak Detector

Home | General Setup | SNMP | Email | Time | Sensors | Services | System

General

Base Information	
Device Name	HWg-WLD
Time	10:24:29
Date	04.02.2010

Sensors			
State	Name	Type	Current Value
✔	Sensor	WLD	0 - Normal

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

Hotovo

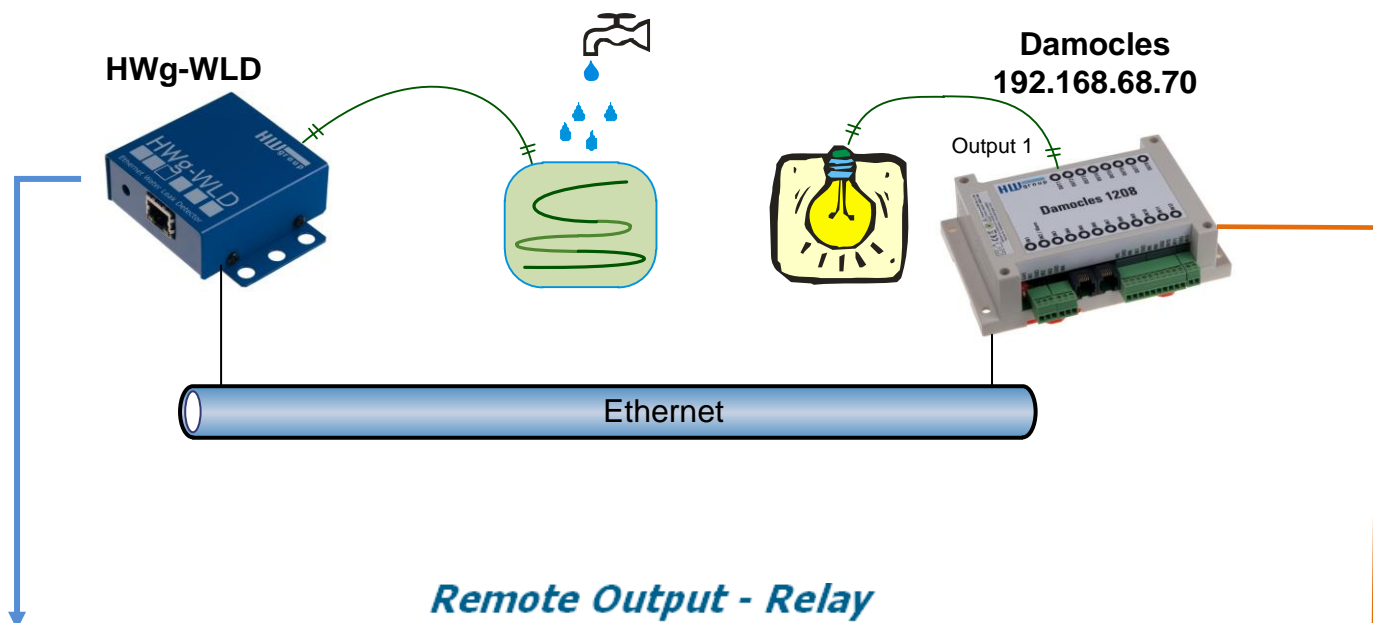
Status row of the leak sensor

Customized text and link for service purpose

Current state of sensor:
0 – Normal
1 – Flooded
2 - Disconnect

First steps

Switch Remote Relay output over the network



Remote Output - Relay

Signal alarm to remote device (relay output) over IP

Target Device	Address	Auth	Remote ID	Inversion	Test (10Sec)
Damocles	192.168.68.70 : 80	Username Password	151	Alarm = ON	Test ON Test Off

Remote ID = 150 + output number.

Output must be set to manual mode.

Navigation: Status | Setup | Email & SNMP | Inputs | **Outputs** | Temperature | Alarms | Email Info | Info | Index Page

Outputs

Output	Name	Current Value	Output Control
01	WLD ON (Closed) Name: ON OFF (Open) Name: OFF	ON (1)	<input checked="" type="radio"/> Manual <input type="radio"/> Local Condition: On if any alarm Trigger Value: 1.0 Dependent on: Input 1(1)

- State 1-normal is equal to alarm off; all other states are equal to alarm on.
- **Username** and **Password** must allow writing to **Target Device**.
- Remote output is realized via XML communication.
- Remote output is synchronized immediately after change happens. Current state is resent to target device (e.g. Damocles) every 10 seconds.
- Upgrade to last firmware version of both devices is highly recommended!

Product configuration

General setup

HWg-WLD: Water Leak Detector

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

General Setup

Device name
Identifies the device in e-mail and SNMP

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

Base		
Name	Value	Description
Device Name	<input type="text" value="HWg-WLD"/>	0 to 16 characters
WWW Info Text	HWg-WLD:For more information try www.hw-group.com	

Standard network configuration

Network		
Name	Value	Description
DHCP	<input checked="" type="checkbox"/>	DHCP Enable/Disable
IP Address	<input type="text" value="192.168.68.4"/>	A.B.C.D
Network Mask	<input type="text" value="255.255.255.0"/>	A.B.C.D
Gateway	<input type="text" value="192.168.68.223"/>	A.B.C.D
DNS Primary	<input type="text" value="192.168.68.223"/>	A.B.C.D
DNS Secondary	<input type="text" value="0.0.0.0"/>	A.B.C.D
HTTP Port	<input type="text" value="80"/>	Default 80

Password to access device configuration

Security: Device Admin		
Name	Value	Description
Username	<input type="text"/>	Admin username/password for device configuration changes [0 to 16 characters]
Password	<input type="text"/>	

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

Protect and hide your settings

All settings will be inaccessible for visitors after you enter Username and Password. Visitors can display home page only!

Lock your settings

If you want lock settings but show it to public use Demo mode (see page System) instead.

SNMP

HWg-WLD: Water Leak Detector

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SNMP

Port for SNMP polling

SNMP device identification, should be equal to device name

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

Define access restriction for SNMP communities

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

Define target servers for sending SNMP Trap

Trap must be enabled to work correctly!

SNMP Trap Destination				
Destination	Community	IP Address	Port	Enable
C.	ControlRoom1	192.168.68.1	162	<input checked="" type="checkbox"/>
D.	ControlRoom2	192.168.1.30	162	<input type="checkbox"/>

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

SNMP Write

HWg-WLD device doesn't accept SNMP write request, column **Write** in section **SNMP Access** is always disabled.

Email

HWg-WLD: *Water Leak Detector*

Home | General Setup | SNMP | **Email** | Time | Sensors | Services | System

SMTP server to use for sending e-mail

Email

Email Settings		
Name	Value	Description
SMTP Server	<input type="text" value="some.smtp.server"/>	IP Address of SMTP server
SMTP Port	<input type="text" value="25"/>	Default 25
FROM	<input type="text" value="user@domain.com"/>	Device email address
Subject	<input type="text" value="subject"/>	Beginning of email subject
Authentication	<input type="checkbox"/>	Enable/Disable authentication
Username	<input type="text"/>	0 to 32 characters
Password	<input type="text"/>	0 to 32 characters
TO	<input type="text" value="recipient@domain.com"/>	Recipient A
CC	<input type="text"/>	
TO	<input type="text" value="recipient@domain.com"/>	Recipient B
CC	<input type="text"/>	
<input type="button" value="Save"/>		

First part (prefix) of the mail subject. Device name and status will be attached automatically

Some SMTP servers require authentication

Send Test Email	
<input type="button" value="Test Recip. A"/>	<input type="button" value="Test Recip. B"/>

Sends a test e-mail to configured recipients

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

Sorting email using field Subject

Subject can be used to easily create sorting rules for incoming mails or handle events generated by your SMS gate (in case Email-2-SMS service).

TO and CC limits

Fields **TO** and **CC** can hold one email address each. No address lists are allowed.

Time

HWg-WLD: Water Leak Detector

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Time

SNTP Setup		
Name	Value	Description
SNTP Server	<input type="text" value="time.nist.gov"/>	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"/>	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="17"/>	:	<input type="text" value="13"/>	:	<input type="text" value="57"/>	hh:mm
Date	<input type="text" value="18"/>	.	<input type="text" value="06"/>	.	<input type="text" value="2010"/>	DD.MM.YYYY
<input type="button" value="Save"/>						

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

Check your DNS settings

- If time synchronization doesn't work by default, check your DNS server setting, or specify IP address in field **SNTP Server** instead of domain name.

Sensors

The screenshot shows the 'Sensors' configuration page for 'WLD Sensor 215'. A callout box explains the sensor name and state: 'Name and current state of water leak sensor: 0 – Normal, 1 – Flooded, 2 - Disconnect'. Another callout points to the 'Alarm Email' section, stating 'Select destination for state reporting'. A third callout points to the 'Periodic Alarm' checkbox, stating 'For periodic reporting use this check box. For detailed settings, see page Services'. Below this is the 'Remote Output - Relay' configuration page. A callout points to the 'Remote ID' field (value 151), stating 'ID of remote port, must be at least 151 ID 151 = Output 1, ID 152 = Output 2 etc.'. Another callout points to the 'Inversion' dropdown (value 'Alarm = ON'), stating 'How to map alarm state to output value'. A final callout points to the 'Test ON' and 'Test Off' buttons, stating 'Permanently switch remote output for testing purpose.'.

Sensors

ID	Type	Name	Current Value	Alarm Email		Alarm Trap		Periodic Alarm
				A	B	C	D	
215	WLD	Sensor	0 - Normal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Remote Output - Relay

Signal alarm to remote device (relay output) over IP

Target Device	Address	Auth	Remote ID	Inversion	Test (10Sec)
Damocles	0.0.0.0 : 80	Username Password	151	Alarm = ON	Test ON Test Off

Additional parameters

Set additional parameters on page **Services** prior to enable **Periodic Alarm!**

Single alarm

If you disable **Periodic alarm**, the alarm will be reporting only once (for each change).

Remote output

Current sensor state can open and close remote relay (e.g. device from family Poseidon or Damocles).

Services

HWg-WLD: *Water Leak Detector*

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Services

Periodic Alarm		
Name	Value	Description
Period	<input type="text" value="0"/> [s]	Periodic alert when Alarm active [s], 0 = disable
Periodic SNMP Trap	<input checked="" type="checkbox"/>	Enable periodic alerts by SNMP Traps
Periodic Email	<input checked="" type="checkbox"/>	Enable periodic alerts by Emails
<input type="button" value="Save"/>		

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

Period is common

Specified **Period** is common for **SNMP traps** and **emails**.

System

HWg-WLD: Water Leak Detector

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System

Current values in XML

Download	
Description	File
Backup configuration	HWg_WLD_Config.bin
Online values in XML	values.xml
SNMP MIB Table	HWg_WLD.mib
TXT list of common SNMP OIDs	HWg_WLD_OID.txt

MIB info file

System	
Name	Value
Version	1.0.5
Compile time	May 10 2010, 13:22:06
Build	1117
Vendor ID	0
UpTime	2:11
Demo Mode	Demo Mode Enable
Upload Firmware or Configuration	<input type="text"/> <input type="button" value="Procházet..."/> <input type="button" value="Upload"/>

Link to switch demo mode on and off

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

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

Lock your settings

Demo mode allows you protect all device settings from changes. In this mode all visitors can freely browse and see all pages, but no configuration change is accepted. You can easily put device to public internet and nobody will change the configuration.

Technical specifications

- **Ethernet:** RJ45 – 10/100 BASE-T
- **1 sensor input:** 2 pins connector for connection sensing cable
- **Device features**
 - **Alarms** by e-mail or SNMP Trap when leak sensor state changed
 - **Remote output or relay** (in Poseidon or Damocles device) can be controlled over network by sensor state
 - **Remote monitoring** of leak sensor
 - **Rack mounting** possibility
- **Power supply:** +5V / 250 mA
- **Dimensions:** 65 x 88 x 30 [mm]
- **LED indicators in the RJ45 connector**
 - Green: Power / Status
 - Rapid flashing: DHCP network configuration in progress
 - Slow flashing: A sensor is in alarm
 - Orange: Link & Activity

ETHERNET	
Interface	RJ45 (10/100BASE-T) – 10 Mbit or 100 Mbit network compatible
Supported protocols	IP: ARP, TCP/IP (HTTP, XML, SNTP, SMTP), UDP/IP (SNMP)
SNMP compatibility	Ver:1.00 compatible, some parts of the ver 2.0 implemented
SENSOR	
Type	Water leak sensing cable
Connector	Terminal block
Sensor states	0 = OK, 1 = Water leak detected, 2 = Sensor disconnected
Sensing cable length	Max 85 meters
Sensors extension	Connecting cable max 100 m, one pair of AWG 24
POWER input	
Power supply	POWER 5V / 250 mA
Connector	Jack Ø3.5 x 1.35 [mm]
LED Status indicators	
POWER / status	Green - power OK (status = DHCP/Local alarm)
LINK & Activity	Yellow - Ethernet connectivity
Physical parameters	
Operating temperature	-10 to 60 °C
Dimensions / Weight	65 x 88 x 30 [mm] / 250 g
EMC	FCC Part 15, Class B, CE - EN 55022, EN 55024, EN 61000