





Safety Notices

The device complies with regulations and standards in force in the Czech Republic and the European Union. The device has been tested and is supplied in working order. To keep the device in this condition, it is necessary to adhere to the following safety and maintenance instructions.

Using the device in a manner other than prescribed by the manufacturer may cause its safeguards to fail!

The power supply outlet or disconnection point must be freely accessible.

The device must not be used in particular under any of the following conditions:

- The device is noticeably damaged
- The device does not function properly
- Unfastened parts can move inside the device
- The device has been exposed to moisture or rain
- The device has been serviced by unauthorized personnel
- · The power adapter or power supply cable are noticeably damaged
- If the device is used in a manner other than designed for, the protection provided by the device may fail.
- The local electrical system must include a power switch or a circuit breaker and overcurrent protection.

The manufacturer warrants the device only if it is powered by the supplied power adapter or an approved power supply.

If you have any problems with installing or operating the device, please contact the technical support:

HW group s.r.o. http://www.hw-group.com email: support@HWg.cz

Formanská 296 Prague, 149 00 Phone: +420 222 511 918

Before contacting technical support, please have at hand the exact type of your device (at the type plate) and, if known, the firmware version (see later in this manual).



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SD devices

The SD family contains simple devices for monitoring temperature, humidity and other parameters or for detecting water leaks, smoke or open windows and doors. The devices connect via wired Ethernet or wireless WiFi to the SensDesk cloud portal.

The SD devices family includes:

SD-2x1Wire plain – a device for connecting thermometers, hygrometers, or other sensors via the 1-Wire bus. Allows connecting four 1-Wire or 1-Wire UNI sensors.

SD-2xIn plain – a device for connecting a door or window contact, a PIR motion detector or a smoke or gas detector, with a dry contact output. Allows connecting 2 independent sensors. *SD-WLD plain* – water leak detector with a moisture-sensing cable. Allows connecting 1 sensing cable of up to 85m length.

SD-2xOut plain – a device with two outputs that can be controlled from the SensDesk portal.

Basic features

- Wired Ethernet as well as WiFi 802.11 b/g/n (2.4GHz)
- Support for simultaneous Ethernet and WiFi operation (for easy setup)
- 5V or PoE power
- Simple installation, supports DHCP
- Embedded WEB server
- · Security protected with a password
- · Support for the SensDesk portal

Technical specifications

Ethernet	
Interfaces	RJ45 (10/100BASE-T)
Supported protocols	IP: ARP, TCP/IP (HTTP, HWg-Push)

External sensors (SD-2x1Wire only)		
Port / connector	Port1, Port2 / RJ11 (1-Wire)	
What can be connected	4 external temperature or humidity sensors at each port. 2 combined temperature + humidity sensors are also supported.	
Sensor types	Only sensors by HW group s.r.o.	
Sensors / distance	Max. 4 probes / values (max. 60 m total length per port)	
Alarm LED	Port1 - Alarm SENS - lights up in case of alarm at the sensor	

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DI – Dry Contact Inputs (SD-2	xIN only)
Port / connector	I1, I2 / terminal block ø 2 mm
Туре	Digital Input (supports NO/NC Dry contact)
Sensitivity	1 (On) = 0-500 Ω (right pin on the terminal block can be connected to 5V GND)
Max. distance	Up to 50 m
LED	2× green – input closed

DI – Dry Contact Inputs (SD-V	/LD only)
Туре	Moisture sensing cable
Connector	Terminal block
Sensor states	O = OK, 1 = flooded, 2 = cable disconnected
Sensing cable length	Up to 85 m
Cable extension	May be extended by at most 100 m, AWG 24
LED	1× green - closed or disconnected cable input

Power	
Supply voltage	5VDC / 250 mA
Connector	Jack Ø 3.5×1.35 / 10 [mm]
PoE (Power over Ethernet)	RJ45 - IEEE 802.3af Class 0

Common LEDs	
LINK	Green – Ethernet connection status
Activity	Yellow - Ethernet activity
WiFi	Blue - connected (lit), searching (slow flashing), connecting (fast flashing)

Push-button	
Reset	To restore factory defaults: press and hold for 5 seconds after connecting power

WiFi	
Supported standards	802.11 b/g/n
Frequency	2,4GHz
Output power	+19.55 dBm output power in 802.11b mode +16 dBm for 802.115n
Security	WEP/WPA/WPA2 PSK/WPA2 TSK/WPS
Antenna	External, RPSMA

Miscellaneous	
Operating temperature	-10 to +60 °C (for the device – sensors may support different operating ranges)
Dimensions / weight	67×78×33 [mm] / 250 g
Electromagnetic radiation	CE / FCC Part 15, Class B
EMC	EN 55022, EN 55024, EN 61000

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Connectors

SD-2x1Wire

- Ethernet for a wired internet connection in case of LAN operation, or for initial configuration in case of WiFi operation. Can be used to power the device via PoE (Power over Ethernet).
- *Temp/Humidity* for connecting up to 4 temperature or humidity sensors/values. The limit is two values per port. The sensor cable can be up to 60m long (per port).
- Power connector for a 5V power supply if the device is powered from an external adapter.
- *Digital Inputs* for connecting dry contact sensors.

LED indicators

- *Link* green LED indicates an active network connection.
- Activity flashing yellow LED indicates ongoing communication over the wired network connection.
- WiFi blue LED indicates an active connection to a WiFi Access Point. While establishing the connection, flashing LED indicates status.
- Alarm LED two LEDs in the Port1 and Port2 connectors. When lit, the LEDs indicate Alarm state at the respective connector.

Buttons

- Reset to reset the device to factory defaults.
- 1. Turn the device off.
- 2. Press and hold the button.
- 3. Turn the device on and hold the button for another 5 seconds.
- 4. All LEDs light up in sequence.
- 5.Turn the device on again, factory defaults are restored.







SD-2xIn

- Ethernet for a wired internet connection in case of LAN operation, or for initial configuration in case of WiFi operation. Can be used to power the device via PoE (Power over Ethernet).
- *Power* connector for a 5V power supply if the device is powered from an external adapter.
- *Digital Inputs* for connecting dry contact probes.

LED indicators

- *Link* green LED indicates an active network connection.
- *Activity* flashing yellow LED indicates ongoing communication over the wired network connection.
- WiFi blue LED indicates an active connection to a WiFi Access Point. While establishing the connection, flashing LED indicates sensor status.
- Inputs when lit, indicates that the contact at the digital input is closed.

Buttons

- Reset to reset the device to factory defaults.
- 1. Turn the device off.
- 2. Press and hold the button.
- 3.Turn the device on and hold the button for another 5 seconds.
- 4. All LEDs light up in sequence.
- 5.Turn the device on again, factory defaults are restored.







SD-2xOut

- Ethernet for a wired internet connection in case of LAN operation, or for initial configuration in case of WiFi operation. Can be used to power the device via PoE (Power over Ethernet).
- Power connector for a 5V power supply if the device is powered from an external adapter.

LED indicators

- *Link* green LED indicates an active network connection.
- Activity flashing yellow LED indicates ongoing communication over the wired network connection.
- WiFi blue LED indicates an active connection to a WiFi Access Point. While establishing the connection, flashing LED indicates status.
- *Outputs* when lit, the corresponding relay contact is closed.

Buttons

- Reset to reset the device to factory defaults.
- 1. Turn the device off.
- 2. Press and hold the button.
- 3.Turn the device on and hold the button for another 5 seconds.
- 4. All LEDs light up in sequence.
- 5.Turn the device on again, factory defaults are restored.





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SD-WLD

- Ethernet for a wired internet connection in case of LAN operation, or for initial configuration in case of WiFi operation. Can be used to power the device via PoE (Power over Ethernet).
- Power connector for a 5V power supply if the device is powered from an external adapter.

LED indicators

- *Link* green LED indicates an active network connection.
- Activity flashing yellow LED indicates ongoing communication over the wired network connection.
- WiFi blue LED indicates an active connection to a WiFi Access Point. While establishing the connection, flashing LED indicates status.
- WLD sensig cable LED when lit, the detection cable is moist or disconnected.

Buttons

- Reset to reset the device to factory defaults.
- 1. Turn the device off.
- 2. Press and hold the button.
- 3.Turn the device on and hold the button for another 5 seconds.
- 4. All LEDs light up in sequence.
- 5.Turn the device on again, factory defaults are restored.





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Setting up

1. Connecting the cables

- Connect the device to the Ethernet (with a patch cable to a switch, or a cross-over cable to a PC).
- Plug the power adapter into a power outlet and connect it to the power connector.
- The green Power&Mode LED in the RJ45 connector lights up.
- If the Ethernet connection works properly, the LINK (amber) LED lights up after a short while, and then flashes whenever data transfer takes place (activity indication).
- Rapidly flashing yellow LINK LED indicates communication with the DHCP server.

2. Configuring the IP address – HWg Config

The tool is available for download at www.HW-group.com -> Software -> HWg Config.

- Click the icon to run HWg-Config. The program automatically searches for connected devices.
- To search for devices, click the Find Devices icon.
- The program searches for devices in your local network. Double-click a MAC address to open a basic device configuration dialog.

Configure the network parameters

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

Click Apply Changes to save the settings.

Restoring factory defaults

- Right-click the device MAC address. Within 60 seconds after powering up the unit, factory defaults can be restored using HWg-Config.
- Press and hold the **RESET** button and connect the power adapter. Hold the button for about another 5 seconds, until all LEDs light up.

WWW interface of the device

To open the WWW interface of the device:

- Enter the device IP address in a web browser.
- Click the underlined IP address in HWg-Config.

HWgro	Version:	Hw' group.		192.168.101		? Book	
nul/gro		the HW group dev	Netmask:	255.255.252 192.168.100		Eind De	vices
levice list							
MAC	Name	-p	Device type	Pot	Parameters		
00:0A.59:04:A0:A0	Poseidon Hwg	132 168 101 211	Poneidon2 model 3468	80	TCP setup=Y, DR	ICP-Y	
00 0A 59 04 F0 F5	Danocles2 MINI	192.168.101.234	Danocles2 model MINI	80	TCP setup=N, DI	ICP-Y	
00:04:59:04:FD:FD	Poseidon2 3268	192 168 101 235	Poseidon2 model 3268	80	TCP setup=N, DI	(CP+Y	
00:0A 59:04 FE 53	SD-Input 5904-F853	192 168 101 226	SD-Eth	80	TCP setup=N, DI	(CP+Y	
00-0A-59-05-05-A1	SD-0utput 5905-054	132,168,101,237	SD-Eth	80	TCP setup=N, DI	(CP+Y	
00 0A 59 05 05 BC	SD-TWire 5905-0580	192 168 102 1	SD - Eth	80	TCP setup=N, DI	ICP-Y	
00:0A:59:04:48:AA	STE2	192.168.102.12	STE2-Eth	80	TCP setup=N, DI	ICP-Y	
00:04:59:04:05:F4	Poseidon2 3266	192 168 103 200	Poseidon2 model 3266	80	TCP setup=Y, DI	IOP+Y	
00:04:59:04:44:51	Danocles2MINI	192,168,100,219	Danocles2 model MINI	80	TCP setup=N, DI	ICP-Y	
00:0A 59:02:16:90	Poseidon2 3468	192 168 103 222	Poseidon2 model 3468	80	TCP setup=N, DI	(CP+Y)	
00.04.59.04.80.75	Hwg-STE Plus	192.168.103.243	Hw/pSTE Plus	80	TCP setup=Y, DI	ICP-Y	
00:04:59:04:0A:95	STE2	192 168 103 244	STE2-Eth	80	TOP setup=N, DI	(CP+Y	
<							

Name:		IP address:	Port	
SD-1Wire 5005-05DC		192.160.102.1 (DHCP)	: 00	
		Enable DHCP		
		MAC.		
255.255.252.0	(DHCP)	00:0A:59:05:05:BC		
Gateway:		FW version:		
192.168.100.1	(DHCP)	1.1.13		
Enable IP access filter		Device type: SD - Eth (83)		
IP filter value:		DHCP:		
0.0.0.0		Supported		
IP filter mask: 0.0.0.0		Enable NVT		
	ults	Enable NVT Enable TCP setup Enable TEA authorisat	<u>O</u> pen tion	
Default values	ults	Enable TCP setup	tion	

HW gro		Hw' goup.	con IP addre		20	? Sbout	ces
Device list							
MAC	Name	-p	Device type	Pot	Parameters		
00:0A.59:04:A0:A0	Poseidon Hwg	132 168 101 211	Poseidon2 model 346	8 80	TCP setup=Y, D	HCP-Y	
00 0A 59 04 F0 F5	Danocles2MINI	192 168 101 234	Danocles2 model MIN	80	TCP setup=N, D	HCP+Y	
00:04:59:04:FD:FD	Poseidon2 3268	192 168 101 235	Poseidon2 model 326	80	TCP setup=N, D	HCPHY	
02-04-59-04-FB-53	SD-Input 5904-F853	192.168.101.236	SD-Eth	80	TCP setup=N, D	HCPvY	
02:0A:59:05:05:A1	SD-Output 5905-054	192.168.101.237	SD - Eth	80	TCP setup=N, D	HCP+Y	
00 0A 59 05 05 BC	SD-TWire 5905-058	C 192.168.102.1	SD - Eth	Show detail :	ettings of device.		
00:04:59:04:48:AA	STE2	192.168.102.12	STE2-Eth			_	
00:04:59:04:05:F4	Poseidon2 3266		Poseidon2 model		Browser (port 80)	
02-04-59-04-44-51	Danocles2MINI		Danocles2 mode	Open TCP Se	tup (port 99)		
00:0A 59:02:16:90	Poseidon2 3468		Poseidon2 model	Download de	rvice configuratio	in	
00.04.59.04.80.F5	Hwg-STE Plus	192 168 103 243			e configuration		
00.04.59.04.04.95	STE2	192 168 100 244	STE2-Eth				
<				Load default	values		>
eady				Export Devic			

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WWW interface

All SD devices have the same graphical WWW interface. They only differ in the logo and the I/O information.

Home

SD-1Wire 5905-05BC	× +			
\rightarrow C \bigcirc) 192.168.102.1	··· 🛛 🏠 🗠	λ Vyhledat	\ ⊡
SD-1Wire	•			HWgrou
	5			1.1.1
HOME GENERAL SETUP	WIFI PORTAL SYSTEM			
Base Information				
Device Name		SD-1Wire 5905-05BC		
Time		16:06:03		
Date		08.03.2019		
[Sensors]	NAME	ТҮРЕ	CURRENT VALUE	
3267, 26c30ct807200892	26c30ct807200892	Humidity	25.4 %RH	
4267, 28ab10f8072008d2	20ab10f8072008d2	Temp.	26.5 °C	

Base Information

- Device Name distinguishes individual devices in larger installations. The name is factorygenerated and uniquely identifies the device.
- *Time* current time on the device clock. The time can be configured automatically over the Internet or from the SensDesk portal. In case of automatic configuration, correct value means that the device can access the Internet. UTC time must be always synchronous with the SensDesk portal.
- Date current date on the device clock. The date can be configured automatically over the Internet or from the SensDesk portal. In case of automatic configuration, correct value means that the device can access the Internet. UTC time must be always synchronous with the SensDesk portal.



[Sensors] (SD-1Wire + SD-Water)

Lists current sensor readings and digital input (dry contact) states.

- ID shows the short and full sensor IDs. The short ID is used for automated processing (contains only numbers). The full ID corresponds to the 1-Wire sensor ID, it is always unique and may contain letters.
- Name sensor name, used for easier identification in large systems. Always corresponds to the full 1-Wire sensor ID, which is also found physically on the sensor.
- Type identifies the sensor type.
- Current value current reading, including the unit.

[Relay Outputs]

- ID shows the ID of the output.
- Name name of the output, used for easier identification in large systems. Always includes the word "Output" + the output ID.
- Type shows the output type.
- Current value current state of the output.

[Digital Inputs]

- ID shows the ID of the input.
- Name name of the input, used for easier identification in large systems. Always includes the word "Input" + the input ID.
- Type shows the input type.
- Current value current state of the input.



General Setup

-> C' 🏠 🛛 🕄 🔏	192.168.102.1/general_setup.xml	🖸 🗘 Vyhledat 🛛 🛝 🖸
-		HUarau
SD-1Wire		n LD grou
		1.1.1
HOME GENERAL SETUP W	IFI PORTAL SYSTEM	
Base		
NAME	VALUE	DESCRIPTION
Temperature unit	Celsius ~	Celsius/Fahrenheit/Kelvin
Network		
NAME	VALUE	DESCRIPTION
DHCP		DHCP Enable/Disable
IP Address	192.168.102.1	A.B.C.D
Network Mask	255.255.252.0	A.B.C.D
Galeway	192.168.100.1	A.B.C.D
DNS Primary	192.168.100.237	A.B.C.D
DNS Secondary	192.168.100.28	A.B.C.D
HTTP Port	80	Default 80
Security: Device Admin		
NAME	VALUE	DESCRIPTION
Username		Admin username/password for device configuration changes
Password		[0 to 16 characters]

Base

• *Temperature Unit* – unit for displaying temperature. Options are Celsius/Fahrenheit/Kelvin. Safe range values are automatically recalculated according to the selection.

Network

Only the wired (RJ-45) network connection is configured here. Use the WiFi tab to configure the wireless connection.

- DHCP enables IP address configuration via a DHCP server if available. Decision whether or not to enable DHCP depends on the user needs and your network administrator.
- IP Address IP address of the device. Assigned by your network administrator.
- Network Mask network mask. Assigned by your network administrator.
- Gateway IP address of the default gateway. Assigned by your network administrator.
- DNS Primary / DNS Secondary IP address of your DNS server. Assigned by your network administrator.
- HTTP Port port number where the built-in WWW server listens. It may be useful to change
 the port number, for instance, if multiple devices need to be accessible from external networks
 via a router. Ask your network administrator whether or not you need to change this value.
 The default port is 80.

Security: Device Admin

• Username / Password – user name and password for securing access to SD devices.



WiFi

When WiFi is off, only the option to enable it is shown:

🔗 SD-1Wire 5905-05BC	× +		- 🗆 ×
-) → C' @	(i) 192.168.102.1/wifi.xml?unique=0.42878691839673544	🗵 🏠 🔍 Vyhledat	\ ⊡ ≡
SD-1Wi	re		HWgroup
	0		1.1.13
HOME GENERAL SETU	JP WIFI PORTAL SYSTEM		
WiFi Setup			
NAME	VALUE	DESCRIPTION	
WiFi Enable:		Enable/Disable	
			Save

After enabling WiFi, more options are available:

> C' 🏠 🧻	2 192.168.102.1/wifi.xml		… ⊠ ☆	Q Vyhledat	III\ (
SD-1Wire	C				H U grou
S U-TAAILe					1.1.1
HOME GENERAL SETUP	WIFI PORTAL SYSTEM				
Information					
WIFI modem state:		Connected			
Current SSID:		Poseidon			
Current BSSID:		FC:EC:DA:	3E:39:E6		
Current RSSI		-82			
Signal Quality:		36%			
Current Channel:		o			
WiFi Setup					
NAME	VALUE		DESCRIPTION	1	
WiFi Enable:			Enable/Disabl	e	
SSID:	Poseidon]	string, AP's S	SID	
Password:	•••••	Show 🗆	string, MAX: 6	1 bytes ASCII	
BSSID		1	string, AP's M	AC address, for several A	Ps may have the same
			SSID		
Network					
NAME	VALUE		DESCRIPTION	1	
DHCP			DHCP Enable/	Disable	
IP Address	192.168.102.0		A.B.C.D		
Network Mask	255.255.252.0		A.B.C.D		
Gateway	192.168.100.1		ABCD		
DNS Primary	192.168.100.237		ABCD		
DNS Secondary	192.168.100.28		ABCD		
					Save
Wifi Scan List					
This obtain List					

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Information

- WiFi modem state displays the WiFi modem status.
 - Disable WiFi turned off.
 - Wait for power on waiting for the WiFi module to switch on.
 - Init WiFi module is being initialized.
 - *Connecting* connection is being established.
 - SSID check SSID is being verified.
 - Connected connected to the selected WiFi network.
 - Network wifi scan looking for available WiFi networks.
 - Wait for scan waiting for the WiFi network scan to start.
- *Current SSID* name of the network to which the device is currently connected. The parameter is not shown if the device is not connected to any WiFi network.
- Current BSSID ID of the WiFi network access point to which the device is currently connected. The parameter is not shown if the device is not connected to any WiFi network.
- Current RSSI relative received signal strength indication. The higher the RSSI, the stronger the signal.
- Signal Quality WiFi signal strength in % and with a graphical indication.
- Current Channel WiFi channel used by the device for the connection. The parameter is not shown if the device is not connected to any WiFi network.

WiFi Setup

- *WiFi Enable* enables or disables WiFi. The wireless interface is disabled by default. After enabling, the device restarts.
- SSID name of the WiFi network to which the device should connect. If the network name is not known, use the Scan AP function at the bottom of the page.
- Password network password. If you don't know it, contact your network administrator.
- BSSID WiFi access point identifier (MAC address). Optional.

Network

WiFi network parameters. Only the wireless interface is configured here. To configure wired Ethernet (RJ-45), use the General Setup tab.

- DHCP enables IP address configuration via a DHCP server if available. Decision whether or not to enable DHCP depends on the user needs and your network administrator.
- IP Address IP address of the device. Assigned by your network administrator.
- Network Mask assigned by your network administrator.
- Gateway IP address of the default gateway. Assigned by your network administrator.
- DNS Primary / DNS Secondary IP address of your DNS server. Assigned by your network administrator.

WiFi Scan List

- SSID name of the discovered WiFi network.
- BSSID access point identifier (MAC address).
- Channel WiFi channel used by the access point.
- Security WiFi security type.
- Signal signal level in decibels. The higher the value, the better. Attention: -60 is better than
 -90! Highlighted row indicates the AP that is currently used.



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Connecting to a discovered WiFi

- By clicking the SSID of the discovered network, WiFi settings are filled in. Only the password needs to be specified manually. The BSSID field remains empty. This is the default setting. When the AP changes, the device reconnects automatically.
- By clicking the BSSID, the MAC address of the specific AP (BSSID) is filled in, in addition to the network name (SSID). The SD device then connects to this specific AP and will not try to change APs in multi-AP networks.

🔗 SD-1Wire 5905-05BC	× +		N= -	
) C' D	192.168.102.1/wifi.xml?unique	2-0.29484504322289	1915 ···· 🖾 🗘 Vyhledat 🕷	\ (
WiFi Setup				
NAME	VALUE		DESCRIPTION	
WiFi Enable:			Enable/Disable	
SSID:	Poseidon		string, AP's SSID	
Password:		Show 🗆	string, MAX: 64 bytes ASCII	
BSSID:			string, AP's MAC address, for several APs may have the sar SSID	ne
			5510	
Network				
NAME	VALUE		DESCRIPTION	
DHCP			DHCP Enable/Disable	
IP Address	192.168.102.0	(A.D.C.D	
Network Mask	255.255.252.0		A.D.C.D	
Catoway	192.168.100.1		A.B.C.D	
DNS Primary	192.168.100.2	37	A.B.C.D	
DNS Secondary	192.168.100.2	8	A.B.C.D	
			Save	
Wifi Scan List				
SSID	BSSID	CHANNEL SE	SECURITY SIGNAL	_
		OF FINEL OF	Scan AP	-
December				_
Poseidon	ECEC/DA'3B'ED'55	11 W		
	CC-CO-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C	4.4		
	FE'EC'DA'3B'ED:55		VPA2 PSK 50%	
Poseidon	FC:EC:DA:3E:39:E6	6 W	VPA2 PSK 40%	
Testovna	FC:EC:DA3E:39:E6 00:04:56:A0:94:D0	6 W	VPA2 PSK 40%	
	FC:EC:DA:3E:39:E6 00:04:56:A0:94:D0 04:18:D6:A9:28:EE	6 Wi 6 Wi 11 Wi	VPA2 PSK 40% VPA2 PSK 30% VPA2 PSK 38%	
Testovna Poseidon	FCECDA3E39E0 000456A094D0 041806A928EE FEECDA3E39E6	6 Wi 6 Wi 11 Wi 6 Wi	VPA2 PSK 40% VPA2 PSK 30% VPA2 PSK 35% VPA2 PSK 35%	
Testovna	FCEC.0x3E.39E6 00.0456.40.94:00 04.19.06.40.28.EE FE.FC.0x3E.39.F5 06.18.06.49.28.EE	6 Wi 6 Wi 11 Wi 6 Wi 11 OF	VPA2 P3K 40% VPA2 P3K 30% VPA2 P3K 35% VPA2 PSK 34% VPA2 PSK 34% VPA2 PSK 35%	
Testovna Poseidon	FCECDA3E39E0 000456A094D0 041806A928EE FEECDA3E39E6	6 Wi 6 Wi 11 Wi 6 Wi 11 OF 11 Wi	VPA2 PSK 40% VPA2 PSK 30% VPA2 PSK 35% VPA2 PSK 35%	

Scan AP

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Portal

Configuration parameters for uploading data to a remote portal using the HWg-PUSH Protocol. For more information about the protocol and the support for portal solutions, see www.hw-group.com.

9	HU	
7		
WIFI PORTAL SYSTEM		
er your IP sensor		
VALUE	DESCRIPTION	
	Portal Enable/Disable	
http://sensdesk.com/portal.php	IP Address or DNS Name	
80	Default 80	
	Push device access parameters	
	see at <u>My account</u> on Sensdesk	
	Save	
900	[s]	
300	[5]	
601	[3]	
	[s]	
145	1.7	
145 0	[5]	
	900 300	

Portal Message

Information from the portal, such as links to graphs. Depends on the portal type.

Portal Config

- Portal turns this feature on or off.
- Server address complete URL of the remote server. Connection parameters for the www.Sens-Desk.com portal are pre-filled. The default is always http://SensDesk.com/portal.php.
- IP Port port where the portal listens.
- Team username for assigning an SD team. You will receive it from your portal administrator.
- Team Password password for assigning an SD team. You will receive it from your portal administrator.



Portal debug

For debugging only.

- *Push Period* period of uploading data to the remote portal. The period is determined by the portal and cannot be changed by the user.
- Log Period period for buffering data for the portal. The period is determined by the portal and cannot be changed by the user.
- Current Push Timer indicates the time until the next upload of data to the portal.
- Current Log Timer indicates the time until the next buffering of data for the portal.
- AutoPush Block Timer event counter for the AutoPush function. If the allowed number of events is exceeded in one Push period, the AutoPush function is disabled.
- Retransmit number number of unsuccessful attempts to upload values to the portal.
- Manual Push button to immediately upload data to the portal.

System

SD - 1Wire 5905 - 05BC × +				- 🗆 🗙
← → C ^a û 192.168.102.1/	system.xml	♡ ☆	Q, Vyhledat	II\ ⊡ ≡
SD-1Wire				HWgroup 1.1.13
HOME GENERAL SETUP WIFI PORTA	L SYSTEM			
Download				
DESCRIPTION		FILE		
Backup configuration		SD-1Wire Config.bin		
Online setup in XML		setup.xml		
System				
NAME	VALUE			
Product Name:	SD-2x1Wire plain			
Serial Number.	6006950011			
Eth MAC Address:	00:0A:59:05:05:BC			
Wifi STA MAC Address:	00:0A:59:05:05:BE			
Version:	1.1.13			
Build:	349			
Compile time:	Feb 27 2019, 17:00:07			
UpTime:	598 [s]			
Network Upgrade	Read available version:			
	Start Network Upgrade.			
Upload Firmware or Configuration:	Procházet Soubor nevybr	án. Upload		
Factory Default		System Restart		
Default			Restart	



Download

- Backup configuration backup of the device configuration in a BIN format. After configuring the SD device, click this link to save the current configuration in case it needs to be restored.
- Online values in XML current readings in the XML format.

System

- Product Name name (type) of the device.
- Serial Number serial number of the device.
- Eth MAC Address MAC address of the device for wired connections.
- WiFi STA MAC Address MAC address of the device for WiFi connections.
- Firmware Version version of the product firmware. Used for diagnostic purposes and troubleshooting.
- Build build number. Used for diagnostic purposes and troubleshooting.
- Compile time date and time when the firmware was compiled. Used for diagnostic purposes and troubleshooting.
- UpTime time since the device was last powered on or restarted. Used for diagnostic purposes and troubleshooting.
- *Read available version* displays the latest firmware version available at the HW group update server.
- Start Network Upgrade starts the firmware upgrade using the HW group update server.
- *Upload Firmware or Configuration* allows uploading a firmware or configuration file to the device. Restoring the configuration may fail if there is a big difference in firmware versions.

Factory Default

Restores factory default settings. The default IP address is 192.168.10.20 and no user name or password is defined.

System Restart

Restarts the device.



WiFi Radio

Description	Min.	Typical	Max.	Unit
Input frequency	2412	-	2484	MHz
Output impedance*	-	*	-	Ω
Tx power				
Output power of PA for 72.2 Mbps	13	14	15	dBm
Output power of PA for 11b mode	19,5	20	20,5	dBm
Sensitivity				
DSSS, 1 Mbps	-	-98	-	dBm
CCK, 11 Mbps	-	-91	-	dBm
OFDM, 6 Mbps	-	-93	-	dBm
OFDM, 54 Mbps	-	-75	-	dBm
HT20, MCSO	-	-93	-	dBm
HT20, MCS7	-	-73	-	dBm
HT40, MCSO	-	-90	-	dBm
HT40, MCS7	-	-70	-	dBm
MCS32	-	-89	-	dBm
Adjacent Channel Rejection				
OFDM, 6Mbps		37		dB
OFDM, 54Mbps		21		dB
HT20, MCSO		37		dB
HT20, MCS7		20		dB

*The typical impedance of the ESP32 chip WiFi radio output differs for different QFN packages. For ESP32 chips in the QFN 6×6 package (ESP32-D0WDQ6), the value is $30 + j10 \Omega$. For ESP32 chips in the QFN 5×5 package (ESP32-D0WD, ESP32-D0WD, ESP32-S0WD), the value is $35 + j10 \Omega$.

Connecting SD devices to SensDesk portal

Connect the device to the network and configure the network parameters (see Setting up).

HWgro	Version:	HW group,		192.168.101		? Abo	ut
www.HW-group.c		the HW group dev	Netmask:	255.255.252 192.168.100		🚖 Eind 🛛	Devices
evice list:							
MAC	Name	^ IP	Device type	Port	Parameters		
00:04:59:04:A0:A0	Poseidon HWg	192.168.101.211	Poseidon2 model 3468	80	TCP setup=1	r. DHCP=Y	
00:0A:59:04:F0:F5	Damocles2 MINI	192.168.101.234	Damocles2 model MINI	80	TCP setup=N	I. DHCP=Y	
00:04:59:04:FD:FD	Poseidon2 3268	192 168 101 235	Poseidon2 model 3268	80	TCP setup=1	I, DHCP=Y	
00:04:59:04:FB:53	SD-Input 5904-FB53	192 168 101 236	SD - Eth	80	TCP setup=N	I, DHCP=Y	
00:0A:59:05:05:A1	SD-Output 5905-05A	192.168.101.237	SD - Eth	80	TCP setup=N	I, DHCP=Y	
00:0A:59:05:05:BC	SD-1Wire 5905-05B0	192.168.102.1	SD - Eth	80	TCP setup=M	I, DHCP=Y	
00:04:59:04:48:44	STE2	192.168.102.12	STE2 - Eth	80	TCP setup-N	I, DHCP-Y	
00:0A:59:04:86:F4	Poseidon2 3266	192.168.103.200	Poseidon2 model 3266	80	TCP setup='	, DHCP-Y	
00:0A:59:04:4A:91	Damocles2 MINI	192.168.103.219	Damocles2 model MINI	80	TCP sctup-M	I, DHCP-Y	
00:0A:59:02:16:90	Poseidon2 3468	192.160.103.222	Poseidon2 model 3468	00	TCP setup-N	, DHCP-Y	
00:04:59:04:0D:F5	HWg-STE Plus	192 160 103 243	HWg-STE Plus	00	TCP setup='	, DHCP-Y	
00.0A.59.04.DA.95	STE2	192.168.103.244	STE2 - Eth	80	TCP setup=N	I, DHCP=Y	
<							>
ady				Filter	All		

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2 Open the device WWW interface:

♂ SD-1Wire 5905-05BC ×	+		- 🗆 ×
← → ♂ @ ③ 19	2.168.102.1	🖂 🎝 🔍 Vy	hledat 🔟 🗉
SD-1Wire			HW group
HOME GENERAL SETUP W			
Base Information			
Device Name		SD-1Wire 5905-05BC	
Time		16:06:03	
Date		08.03.2019	
[Sensors]			
ID	NAME	TYPE	CURRENT VALUE
3267, 26c30cf807200892	26c30cf807200892	Humidity	25.4 %RH
4267, 28ab10/8072008d2	28ab1018072008d2	Temp.	26.5 °C

3 At the Portal tab, check the **Portal** box and click **Save**.

→ Cª û			
	I 192.168.102.1/portal.xml?unique=0.526781182211292	••• 🗵 🏠 🔍 Vyhledat	\ ⊡
<mark>SD</mark> -1Wiı	re		HW gro
HOME GENERAL SETU	JP WIFI PORTAL SYSTEM		
Portal Message			
SonsDosk.com: rogi	istor your IP sensor 🔉 🔺		
Portal config			
NAME	VALUE	DESCRIPTION	
Portal	F 3.2	Portal Enable/Disable	
Server Address	http://sensdesk.com/portal.php	IP Address or DNS Name	
IP Port	80	Default 80	
Team			
Team Password		Push device access parameters see at <u>My account</u> on Sensdesk	
			Save 📐
			4
Portal Debug			
Push Period:	900	[s]	
Log Period:	300	[8]	
Current Push Timer:	601	[0]	
Current Log Timer:	145	[s]	
Current Check Timer:	0	[\$]	
AutoPush Block Timer:	0	[\$]	
Retransmit number:	0	[\$]	
TimeSync, addr: eur	rope.pool.ntp.org, ip 62.113.233.18		

Glick the SensDesk.com: register your IP sensor link to go to the SensDesk.com login dialog.

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If you already have a user account, enter your login credentials. The device is automatically linked to your account.

If you don't have a user account yet, click the **Register to Portal** link. The registration form displays.





Enter your login credentials and a valid e-mail address. The e-mail address must be unique within the portal, it must not have been already registered.

After clicking **Create new account**, your account is created and a confirmation e-mail is sent to the address specified.

→ C* @ ()				- 0
	🗓 🔏 sensdesk.com/user/register	80% … 🛛 🟠	Q Vyhledat	III\ 🗉
User account	GROUP			Login
Create new account	Log in Log in Request new pa	ssword		
TEAM				
LOGIN				
Username *				
E-mail address *				
Password *	Password strength:			
Confirm password *				
Provide a password for the ne	ew account in both fields.			
Provide a password for the ne	w account in both fields.			
	w account in both Helds.			
Provide a password for the ne	w account in both Helds.			
COUNTRY	w account in both fields.			
COUNTRY Country *				
COUNTRY Country * - Select a value -				
COUNTRY Country *				
COUNTRY Country * - Select a value -	T			
COUNTRY - Country - - Select a value - HW group device(s) *	T			
COUNTRY - Country - - Select a value - HW group device(s) *	• e) you plan to use with SensDeek.			
COUNTRY Country * - Select a value - HW group device(s) * Write us which HW group device(• e) you plan to use with SensDeek.			
COUNTRY Country * Country * Select a value - HW group device(s) * Write us which HW group device(Lagree with license co	• e) you plan to use with SensDeek.			
COUNTRY Country * - Select a value - HW group device(s) * Write us which HW group device(Lauree with license co	• e) you plan to use with SensDeek.	nt automated sparm aubmissions.		
COUNTRY Country * - Select a value - HW group device(s) * Write us which HW group device(Laures with license co CAPTONA This question is for testing	•) you plan to use with SensDeek. millions *	nt automated spam aubmissions.		
COUNTRY Country * - Select a value - HW group device(s) * Write us which HW group device(Lauree with license co	•) you plan to use with SensDeek. millions *	nt automated spam aubmissions.		
COUNTRY Country * - Select a value - HW group device(s) * Write us which HW group device(Laures with license co This question is for testing) you plan to use with SonsDeek. Inditions * whether or not you are a human visitor and to preve	nt automated spam aubmissions.		

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At the Teams tab, find the Team Password. This password, together with your username, is needed for communication between the device and your account and between mobile apps and the SensDesk portal. The password cannot be changed, and for security reasons it is different from the user account password.

SD 1Wire 5905-05BC	🗙 🔓 Team SensDesk	× +		- 🗆 ×
← → ♂ ଢ	(i) sensdesk.com/sensdesk/team/213	80%	♥ 🛛 🏠 🔍 Vyhledat	
			Login: demo My account Help Lice	ense Log out
Dashboard	Device groups Devices	Locations Permission gro	oups Sensors Teams 🗼	Users
Home * Teams				
Team				
View Edit	values.xml			
PUSH login: demo PUSH password: demo values.xml key: 82F-w	LpYQINXTjijZsHoa_YT2vGU3zamyXyA-Wu_(szQ		

B This username and password can be manually entered in the portal settings in the web interface of the device in order to avoid the need to register and sign in.

→ C ^e 🏠 🗍 🕺 192	2.168.102.1/portal.xml?unique=0.64608554762001	••• 🕑 🏠 🔍 Vyhledat	III\ 🗉
—			H LU gro
SD-1Wire			11
IOME GENERAL SETUP WIFI	PORTAL SYSTEM		
Portal Message			
SonsDesk.com: Check sensor	contino. 📐 🕤		
Portal config			
NAME	VALUE	DESCRIPTION	
Portal		Portal Enable/Disable	
Server Address	http://sensdesk.com/portal.php	IP Address or DNS Name	
IP Port	80	Default 80	
Team	demo 🔉 🔒	Push device access parameters	
Team Password	••••	see at <u>My account</u> on Sensdesk	
			Save
			Save
Portal Debug			
Push Period:	30	[s]	
Log Period:	10	[5]	
Current Push Timer:	26	[8]	
Current Log Timer:	1	[5]	
Current Check Timer:	0	[s]	
AutoPush Block Timer:	0	[8]	
Retransmit number:	0	[5]	
TimeSync, addr: europe.pool.	ntp.org, ip 52.29.139.27		

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It display your device in the SensDesk portal, click the SensDesk.com: Check sensor online link.



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Using the mobile phone app

The Team and the Team Password can be also used in the mobile app settings.

ensDesk Mobile		
ALL	ALARMS	Sort by DEVICES
SD-WLD	0	WLD
SD-2xIN	0	Input 2
SD-1Wire	2	7.3 °C Sensor 47117
SD-2xOU	т О	Output1
SD-WLD	0	WLD



Mechanical dimensions





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More monitoring devices by HW group





Designed for demanding monitoring applications, such as in data centers and industrial settings.



Poseidon2 3266/3268

Basic unit for monitoring temperature, humidity, and other sensors over the network.



Damocles2 2404

Secure industrial I/O device with PoE and telco -48V power options.



Poseidon2 3468

Remote monitoring of temperature, humidity and other sensors. Industrial version.



Ares 10/12

Remote environment monitoring at any place with GSM coverage.



HWg-PWR 3/12/25

Consumption metering with external M-bus meters.



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