MOUNTING AND OPERATING INSTRUCTIONS



EB 6616 EN

Translation of original instructions



TROVIS 6616 Web Terminal

TROVIS 6600 Automation System

Firmware version 1.41

Edition July 2019

Note on these mounting and operating instructions

These mounting and operating instructions assist you in mounting and operating the device safely. The instructions are binding for handling SAMSON devices.

- ➔ For the safe and proper use of these instructions, read them carefully and keep them for later reference.
- ➔ If you have any questions about these instructions, contact SAMSON's After-sales Service Department (aftersalesservice@samson.de).



The mounting and operating instructions for the devices are included in the scope of delivery. The latest documentation is available on our website at www.samson.de > Service & Support > Downloads > Documentation.

Definition of signal words

Hazardous situations which, if not avoided, will result in death or serious injury

Hazardous situations which, if not avoided, could result in death or serious injury

Property damage message or malfunction

i Note

Additional information

∹∑- Tip

Recommended action

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Old > New	Firmware revisions
1.40 > 1.41	Internal revisions

1 Safety instructions and measures

Intended use

The TROVIS 6616 Web Terminal is an optional component of the TROVIS 6600 Automation System and is used in conjunction with a TROVIS 6610 CPU Module or a TROVIS 6611 Control and Automation Unit and is suitable for mounting in switching cabinet panels. The user can view operating data on site on the touch screen, change set points and parameters as well as access time schedules of a building automation system.

The web terminal is designed to operate under exactly defined conditions (e.g. supply voltage, ambient conditions). Therefore, operators must ensure that the web terminal is only used in applications where the operating conditions correspond to the technical data. In case operators intend to use the web terminal in other applications or conditions than specified, contact SAMSON.

SAMSON does not assume any liability for damage resulting from the failure to use the device for its intended purpose or for damage caused by external forces or any other external factors.

→ Refer to the technical data for limits and fields of application as well as possible uses. See section 3.2.

Reasonably foreseeable misuse

The web terminal is not suitable for the following applications:

- Use outside the limits defined during sizing and by the technical data

Furthermore, the following activities do not comply with the intended use:

- Use of non-original spare parts
- Performing service and repair work not described in these instructions

Qualifications of operating personnel

The web terminal must be mounted, started up, serviced and repaired by fully trained and qualified personnel only; the accepted industry codes and practices are to be observed.

According to these mounting and operating instructions, trained personnel refers to individuals who are able to judge the work they are assigned to and recognize possible hazards due to their specialized training, their knowledge and experience as well as their knowledge of the applicable standards.

Personal protective equipment

No personal protective equipment is required.

Revisions and other modifications

Revisions, conversions or other modifications of the product are not authorized by SAMSON. They are performed at the user's own risk and may lead to safety hazards, for example. Furthermore, the product may no longer meet the requirements for its intended use.

Safety features

Registration to the web terminal is password-protected to protect it from unauthorized access. The password that is valid on the first start-up can be found on page 69. To avoid its unauthorized use, remove the page or make the password unreadable.

Warning against residual hazards

The web terminal allows users to directly influence the TROVIS 6610 CPU Module or TROVIS 6611 Control and Automation Unit and, as a result, the controlled system components (e.g. control valves and pumps). To avoid personal injury or property damage, plant operators and operating personnel must prevent hazards that could be caused in the plant components by the process medium, the operating pressure, the signal pressure or by moving parts by taking appropriate precautions. They must observe all hazard statements, warning and caution notes in the referenced documents.

Responsibilities of the operator

The operator is responsible for proper operation and compliance with the safety regulations. Operators are obliged to provide these mounting and operating instructions to the operating personnel and to instruct them in proper operation. Furthermore, the operator must ensure that operating personnel or third persons are not exposed to any danger.

Responsibilities of operating personnel

Operating personnel must read and understand these mounting and operating instructions as well as the specified hazard statements, warning and caution notes. Furthermore, the operating personnel must be familiar with the applicable health, safety and accident prevention regulations and comply with them.

Referenced standards and regulations

The web terminal fulfills the requirements of the Directives 2014/30/EU, 2014/35/EU and 2011/65/EU. The declaration of conformity includes information about the applied conformity assessment procedure. This declaration of conformity is included in the appendix of these instructions.

The web terminal is designed for use in low voltage installations.

→ For wiring, maintenance and repair, observe the relevant safety regulations.

Referenced documentation

The following documents apply in addition to these mounting and operating instructions:

- ▶ AB 6600: System integration guidelines for electrical technicians
- EB 6610: TROVIS 6610 CPU Module
- ▶ EB 6611-2: TROVIS 6611 Control and Automation Unit

1.1 Notes on possible property damage

Damage due to water entering the device.

The front of the web terminal is protected against water jets (IP 65).

➔ Avoid powerful jets of water.

Manipulation of settings due to unauthorized access.

The web terminal supports various communications protocol (e.g. a web server). This allows remote access. To protect it from unauthorized access, the onsite and remote operation of the web terminal is password-protected:

➔ Do not pass login data on to unauthorized persons. Keep them in a safe place inaccessible to unauthorized persons.

2 Markings on the device



3 Design and principle of operation

The web terminal runs as a web client under the Android operating system. An unlimited number of web terminals can be connected to a CPU module.

The TROVIS 6616 Web Terminal can only be used in conjunction with a TROVIS 6610 CPU Module or TROVIS 6611 Control and Automation Unit.

When using a TROVIS 6610 CPU Module, any graphic visualization saved on the web server of the CPU module can be accessed using a Java-enabled browser. When using a TROVIS 6611 Control and Automation Unit, any saved graphic visualization can be accessed using a HTML-enabled browser.

The TROVIS 6616 Web Terminal allows access to the visualization of several TROVIS 6610 CPU Modules or TROVIS 6611 Control and Automation Units. All plant schemes are saved in the CPU module or automation unit. The web terminal can be used to view, for example colored plant schemes with dynamically refreshed values. Data, such as set points, time programs etc., can be conveniently changed on the touch screen.

The alarm list shows recorded events in chronological order with a comment.

Online or historical data can be viewed on the TROVIS 6616 Web Terminal and saved to CSV files for further processing on an external device, which can be plugged into the USB port. Alternatively, the text-based user interface of TROVIS Mobile can be used.

Requirements to use the TROVIS 6610 CPU Module:

- A project must be saved in the TROVIS 6610 CPU Module configured using the TROVIS 6690 Graphical Project Management Tool.
- The project requires a web application created using the TROVIS 6693 Web Terminal Editor or a TROVIS Mobile web application created using the TROVIS 6690 Graphical Project Management Tool.

Requirements to use the TROVIS 6611 Control and Automation Unit:

- A project must be saved in the TROVIS 6611 Control and Automation Unit configured using the TROVIS 6690 Graphical Project Management Tool.
- A process view application must be included in the project.

Associated software

Operating system	Android 5.0 with browser Part of TROVIS 6616 Web Terminal
Application	Microbrowser for Android version 1.6.40.148 and higher
Graphical project management tool	TROVIS 6690 (not included in the scope of delivery)
Web terminal editor	TROVIS 6693 (not included in the scope of delivery)
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Network expansion (without repeaters, hubs etc.)

Ethernet Crossover cable 100BaseT LAN type

Cable recommendation

- 24 V AC 1.5 mm² stranded wire
- Ethernet Min. Cat 5 cable, shielded (STP)

Supply voltage

24 V DC or Power over Ethernet (PoE)

3.1 Operating controls



Touch screen

The web terminal is operated on the front touch screen.

Interfaces

- 1x USB port (3) to connect a USB flash drive for importing or exporting configuration data.
- 1x RJ-45 jack/Ethernet port (1) to connect the web terminal to the Internet

Reset button (2)

Press the reset button to reboot the web terminal.

3.2 Technical data

Power supply	
Supply voltage	24 V DC or Power over Ethernet (PoE)
Power consumption	7.4 W
PE	 a) Wire cross-section stranded with ferrule without plastic sleeve, max. 1.5 mm²
	b) Wire cross-section stranded with ferrule and plastic sleeve, max. 0.5 mm²
Temperature range	
Operation	0 to 50 °C
Transportation and storage	0 to 70 °C
Relative humidity	10 to 90 %, non-condensing
Electromagnetic compatibility	
Noise emission	According to EN 61000-6-3
Noise immunity	According to EN 61000-6-2
Device safety	
Class of protection	Il according to EN 61140: 2003
Overvoltage category	II according to EN 60664-1
Degree of contamination	2 according to EN 60664-1
Degree of protection	IP 65 at the front, IP 20 at the back
CE	EN 55022: 2010 Class B
	EN 61000-6-2: 2005
Performance	
CPU	i.MX6
RAM	1 GB RAM
Display	7" widescreen LED-TFT monitor, projected capacitive touch screen
Resolution	800x480 pixels, can be used for applications with 758x480 pixels
Interfaces	
USB	1x USB 2.0 A
Ethernet 10/100 with 802.3af PoE (Power over Ethernet)	1x RJ-45
Compliance	C€ER[





4 Measures for preparation

After receiving the shipment, proceed as follows:

- Check the scope of delivery. Compare the shipment received with the delivery note.
- 2. Check the shipment for transportation damage. Report any damage to SAMSON and the forwarding agent (refer to delivery note).

4.1 Unpacking

i Note

Do not remove the packaging until immediately before mounting and start-up.

- 1. Remove the packaging from the web terminal.
- 2. Dispose of the packaging in accordance with the valid regulations.

4.2 Transporting

- Protect the web terminal against external influences (e.g. impact).
- Protect the web terminal against moisture and dirt.
- Observe the permissible transportation temperature of 0 to 70 °C.

4.3 Storage

Risk of damage to the web terminal due to incorrect storage.

- Observe the storage instructions.
- Avoid long storage times.
- Contact SAMSON in case of different storage conditions or long storage periods.

i Note

We recommend regularly checking the web terminal and the prevailing storage conditions during long storage periods.

Storage instructions

- Protect the web terminal against moisture, dirt and other external influences (e.g. impact).
- Make sure that the ambient air is free of acids or other corrosive media.
- Observe the permissible storage temperature from 0 to 70 °C.
- Do not place any objects on the web terminal.

5 Mounting and start-up

5.1 Installation

The web terminal is designed for panel mounting with the front dimensions 208x144 mm.

Install as follows:

- → Make panel cut-out with the dimensions 186x123 mm.
- → Slide the web terminal from the front with the ventilation slits facing upward into the panel cut-out.
- → Clamp the web terminal from the back against the control panel using the four supplied clips.

5.2 Electrical connection

The web terminal is powered either by a 24 V DC supply or using Power over Ethernet (PoE).

For connection using Power over Ethernet:

→ Plug the Ethernet cable (min. Cat 5, shielded) into the RJ-45 jack (see Fig. 2) of the web terminal and into the jack intended for it on the CPU module, automation unit or a switch.

5.3 Start-up

The TROVIS 6616 Web Terminal is used in conjunction with a TROVIS 6610 CPU Module or TROVIS 6611 Control and Automation Unit.

Necessary conditions for start-up

- Ethernet must be connected to the CPU module/automation unit.
- The TROVIS 6616 Web Terminal and the CPU module/automation unit must be configured using the same subnetwork.
- Ethernet can either be connected directly to the CPU module/automation unit or over active components.

We recommend using a PoE (Power over Ethernet) switch. As a result, the external DC voltage supply for the TROVIS 6616 Web Terminal is not required.

- Use a crossover cable (100BaseT LAN type) to directly connect the web terminal to the CPU module/automation unit.
- To establish connection over active components (switch/hub), a 1:1 cable must be used. Refer to the manual of the components used for more information.

The SAMSON start screen appears approx. 25 seconds after the Ethernet connection is established. The Launcher starts automatically.

The Setup Wizard appears 15 seconds after the Launcher starts on starting for the first time.

- Browser
 Auto Start
 MicroBrowser
- If the ready-configured IP address (172.30.240.100/16) is to be changed:
 - 1.1 Enter new IP address.

B IP address

1.2 Confirm IP address.

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2. The netmask, DNS and gateway configurations can be changed as described in step 1.

i Note

If no DNS or gateway is required, the IP address of the local host needs to be entered.



3. Enter the IP address of the TROVIS 6610 CPU Module/ TROVIS 6611 Control and Automation Unit.

TROVIS 661x

The IP address of the CPU module/automation unit is automatically entered in the host file so that the CPU module/automation unit can be addressed by its host name 'trovis661x'.

- Start the FTP server, if it is not already activated, by checking the box. The checked box indicates that the FTP server is active.
- 5. Confirm configuration.



6. Reboot the web terminal.

🕄 📑 and reboot

		2:49
Setup Wizard		
IP Address	172.30.240.100	
Netmask	255.255.0.0	
DNS 2.	127.0.0.1	
Gateway 2.	127.0.0.1	
TROVIS 661x 3.	172.30.245.118	
Timeserver	trovis661x	
Autostart FTP Server		4. 🔶 🔳
Show Wizard at next boot		
	5> save	

Setup Wizard	6.	Reboot	2.49
P Address	172.30.240.100	Exit	
Vetmask	255.255.0.0		
DNS	127.0.0.1		
Gateway	127.0.0.1		
TROVIS 661x	172.30.245.118		
limeserver	trovis661x		
Autostart FTP Server			
show Wizard at next boot			
	SAVE		

Measures for preparation

- 7. Confirm "Reboot system?".
- 8. Continue as described in section 5.5.



5.4 Restarting the Setup Wizard

- 1. Open the Settings menu:
 - 1.1 Swipe to the left to go to the second page of the Launcher.



1.2 Open the menu.

Settings

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- 2. Enter password:
 - 2.1 Tap input field.

🖓 Password

- 2.2 Enter the password using the number pad.
- 2.3 Confirm.





The password that is valid on first start-up can be found on page 69. To avoid its unauthorized use, remove the page or make the password unreadable. 3. Start the Setup Wizard. Start Wizard

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	Change us	er password		
	Change admini	strator passwo	ord	
Pages		•	Save	
	Android	d settings		
. -> s	tart Wizard	Sta	art App	
Resto	re configuration	Backup o	configuration	
	Shutdown	Reset	Launcher	
	Re	start		

- 4. Change setup settings as described in the previous section. Save the new settings.
- 5. Shut down and reboot the web terminal.

					3:09	
Setup Wizar	rd					
Language		English			*	
Connection	type	🔿 рнср 🔵	Manual			
IP Address		172.30.243.118				
Netmask		255.255.0.0				
		107.0.0.1				0
	1	2 авс	3 DEF	-		
	4 GMI	5 JKL	6 мно			
	7 PORS	8 TUV	9 wxyz	Ø		∇
	* #	0 +	_	0		

5.5 Configuring Auto Start

The application determined in Auto Start starts automatically on starting the web terminal.

1. Open the Auto Start menu.

Auto Start

R



 If the required application (e.g. MicroBrowser) does not appear under 'Applications', add the required application.

Applications

i Note

To use the TROVIS MOBILE application instead of the MicroBrowser application, select 'Browser'.

- 3. Activate Auto startup by selecting the green ON button.
- 4. Exit configuration.





Measures for preparation

5. Exit the configuration menu.



i Note

If a different application other than one determined in Auto Start is to be started, this must be opened manually.



6 Setup

6.1 MicroBrowser application

The start screen appears when no users are logged in.



i Note

Status bar and toolbar remain visible in most cases.

6.1.1 Logon

→ Enter password.

Please enter your password

➔ Confirm.

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i Note

The password determines which user level applies.

After logging on:



The logon status changes to logged in.



The key indicates which user level is active.



(only in user level 3 and 4)

The date and time of the TROVIS 6610 CPU Module can be changed in user level 3 (Engineer) and 4 (Admin).



Logoff before the time entered for automatic logout elapses.





6.1.2 Main menu

➔ Open main menu.



The main menu of the master for the SAMSON TROVIS 6693 Web Terminal Editor is shown in this example.

If the system is made up of just one graphic, the system image is directly shown after opening the main menu.

	Mea	asured value	
Sche	duler	Trend	
Pre cont	trol loop	Online Trend	1

6.1.3 Offline and online trends

6.1.3.1 Historical data (offline trend)

➔ Go to historical data.



Possible actions:

- View the course of a data point in a graph.
- Restrict the time period of the graph.
- Change how the graph is shown.
- Export data.
- Exit the graph.



Setup

Viewing the course of a data point in a graph

- → Select the data point from the bottom left-hand list.
- → Move the data point into the middle list.



→ Load the start and end dates of the data point into the corresponding data entry fields.



→ Load the data point into the graph.



The course of the data point between the start and end dates is plotted.

Restricting the time period of the graph

→ Delete the plotted data point. This does not cause any data in the CPU module to be deleted.



- ➔ Enter the start and stop times. Date format: DD.MM.YYYY; time format: hh:mm:ss
- → Confirm the start and stop times.

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→ Refresh the start and stop times.



→ Load the data point into the graph.



⁻\̈́\/̄⁻ Tip

The plotted data point must only be deleted if the displayed time period needs to be shortened. If, for example, the time period between 22.10 and 28.10 has been selected, data for the time period between 21.10 and 28.10 can be displayed without having to delete the plotted data point first. However, if the data point is then to be displayed for the time period between 26.10 and 28.10, the plotted data point must be deleted beforehand.

Setup

Changing how the graph is displayed

→ Shift the displayed graph section to the right or left.



→ Reduce/expand the graph.



Exporting data

→ Save data in CSV format to the internal memory or to an external memory (USB flash drive).



Exiting the graph

→ Return to the main menu.



6.1.3.2 Online data (online trend)

→ Go to online data. Data defined in the TROVIS 6693 Web Terminal Editor are shown. It is not possible to select other data on the web terminal.



i Note

The display range and logging time are determined on creating the web page using the TROVIS 6693 Web Terminal Editor. The maximum data logging time is 25 hours.



The width of the graph is reduced by the automatic scaling of the Y axis when a large amount of measured data exists.



Alternatively, the automatic scaling of the Y axis can be deselected to make the graph larger.

Possible actions:

- Change how the graph is displayed.
- Stop data logging.
- Export data.

Changing how the graph is displayed

→ Shift displayed graph section to the right or left.



→ Reduce/expand the graph.





Stopping data logging





Exporting data

→ Save data in CSV format to the internal memory or to an external memory (USB flash drive).

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6.1.3.3 Configuring the target directory

The default directory for saving offline and online trend data is [/mnt/sdcard/Download] on the web terminal. Data can also be saved to a computer or USB flash drive.

Saving data to a computer

An FTP client (e.g. File Zilla) is required.

Login data:

Server:	IP address of the web terminal
User name:	www
Password:	0725
Port:	2121

Copying data to a USB flash drive

- 1. Insert the USB flash drive into the side USB port.
- 2. Go to the login page.



3. Open the configuration menu.





Setup

- Select [/storage/udisk] directory by checking the box.
- 5. Go to historical data or online data.



6. Save data.





Before removing the USB flash drive:

- → Repeat steps 1 to 4.
- → Deselect [/storage/udisk] directory by unchecking the box.

6.1.4 Active alarms

➔ Go to active alarms.



The total number of active alarms as well as each individual alarm with the time and date of its activation are listed.

Alarms that are no longer valid are removed from the list without any additional information. The list starts with most recently generated alarm (TROVIS 6610 CPU Module with firmware 2.0 and higher).

Alarmtext	Time On	Dalla
Alarm 02	24.07 2010 12 59.02	rg op
Nam 03	2407 2019 13 59 03	
Narm 05	2407 2019 13 59 03	
Alarm 04	24 07 2019 13 59 03	
Narm 06	2407 2019 13 59 03	
Narm 08	24.07 2019 13 59 03	
Alarm 07	24.07 2019 13 59 03	
Alarm 01	24 07 2019 13 59 03	
Alarm 09	24.07 2019 13 59.03	
Alarm 10	24 07 2019 13 59 03	
rost	24.07 2019 13 58 11	
Measured value 5	24 07 2019 13 54 40	
Measured value 4	24 07 2019 13 53 12	
Measured value 3	24.07 2019 13 52 04	
Measured value 2	24 07 2019 13 51 03	
Measured value 1	24.07 2019 13 50:09	
		PG Do
		1001
Numer of Alerts: 16		

6.1.5 Service page

i Note

The service page can only be opened in user level 4 (administrator).

→ Open the service page.



Possible actions:

- Change automatic logoff time.
- Read time and date of TROVIS 6610 CPU Module.
- Read web terminal details (browser version, XML version, operating system and network configuration).
- 24 67 2014
 200

 14 67 2014
 120

 201
 12

 21
 201

 22
 201

 202
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 203
 201

 204
 120

 205
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 205
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 201

 205
 201
- Start I/O View web application.

6.1.5.1 I/O View web application

The *I/O View* web application enables users to access the input and outputs of the TROVIS 6610 CPU Module and the connected TROVIS 6620 and TROVIS 6625 Modules without the TROVIS 6690 Graphical Project Management Tool. The signal states of the inputs can be read, while the states of the outputs can also be changed over forced manual operation. This allows pumps and control valves to be tested without wiring the system.

→ Start or exit *I/O View* web application.



6.1.6 Schedule

→ Open schedule in the overview of the systems.



Possible actions:

- Add switching times.
- Change switching times.
- Delete switching times.
- Create special schedule.

6.1.6.1 Adding switching times

1. Select the day of the week that you want to configure.



2. Tap the time button to enter the first switching time.

--:-- - --:--

ß

3. Set start and end times (steps of 15 minutes).



4. Confirm configuration.



i Note

The configuration can be exited without saving it by tapping the stution.

The 'Schedule added' message confirms that the configuration has been saved.

5. Add an additional switching time, if required.

€ [S
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A maximum of 35 switching times per week can be configured.

6. Return to weekly schedule.





S	5. Monday	- 6.
	Schedule added	

7. Exit the schedule.



i Note

Exit the schedule by tapping the solution in the Windows version of the MicroBrowser.

Weekly schedule T.1 f Mon 00 01 02 00 00 05 06 07 00 00 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Weekly schedule 00 01 02 02 00 00 50 00 10 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Weekly schedule 00 01 02 02 00 00 50 00 10 10 11 12 13 14 15 16 17 18 19 20 21 22 23 Weekly schedule (Dr.1 x Sut Sun Mon Tue Weekly schedule (Dr.1 x Sut Sun Sun	Weekly schedule T.1 A Max 00 01 02 00 04 05 06 07 00 09 10 11 12 13 14 15 16 17 13 19 02 02 12 22 0 Weekly schedule Max 00 01 02 00 04 05 06 07 00 09 10 11 12 13 14 15 16 17 13 19 02 02 12 22 0 Weekly schedule Max 00 01 02 00 04 05 06 07 00 09 10 11 12 13 14 15 16 17 13 19 02 02 12 22 0 Weekly schedule Max 00 01 02 00 04 05 06 07 00 09 10 11 12 13 14 15 16 17 13 19 02 02 12 22 0 Weekly schedule Max 00 01 02 00 04 05 06 07 00 09 10 11 12 13 14 15 16 17 13 19 02 02 12 22 0 Weekly schedule Max 00 01 02 00 04 05 06 07 00 09 10 11 12 13 14 15 16 17 13 19 02 02 12 22 0 Weekly schedule Mon Tue Weekly Thu Fri Sat Sur	00 07 02 08 04 05 06 07 08 09 10 11 12 12 14 15 16 17 18 19 20 21 22 22 00 07 02 08 04 05 06 07 08 09 10 11 12 12 14 15 16 17 18 19 20 21 22 22 00 07 02 08 04 05 06 07 08 09 10 11 12 12 14 15 16 17 18 19 20 21 22 22
Weekly schedule [0:10. X 7.2 Weekly schedule [0:10. X 7.2	Mon Tue Wed Thu Fri Sat San Mon Tue Wed Thu Fri Sat San	
000 01 02 03 04 05 66 07 08 09 01 11 12 13 14 15 16 17 18 19 20 21 22 23 Toe Wed Toe Wed Tou Fri Sat Sun	Mon Tue Wed Thu Fil Sat Sun Mon Tue Wed Thu Fil Sat Sun	00 01 02 03 04 05 06 07 06 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Man Man Man Man Man Man Tue Wed Thu Fri Sat San + R : Weekly schedule [0:12. × ← 7.2]	Mon Tue Wed Thu Fri Sat Sun Mon Tue Wed Thu Fri Sat Sun Weekly schedule [ort. × ← 7.2]	
Week schedule (0:1c. × ← 7.2)	Wed Fi Sur Mon Tue Wed Thu Fri Sut Sun Wedkly schedule [orte: × 7.2]	
thu has been and the schedule (0x1c. × ← 7.2)	tha n Sat Sat Sat Mon Tue Wed Thu Fri Sat Sun + Q : Weekly schedule [0:1c. × ↓ - 7.2]	
Mon Tue Wed Thu Fi Sat San + A : Weekly schedule (pric. × -7.2)	Mon Tue Wed Thu Fri Sat Sun + A : Weekly schedule [onte. × - 7.2]	N 등 정 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등
Mon Tue Wed Thu Fri Sat Sun + R : Weekly scheduls (2x1c. × -7.2)	Mon Tue Wed Thu Fri Sat Sun + R : Weekly schedule [0r1c. × - 7.2]	
Mon Tue Wed Thu Fri Sat San + Fi : Weekly schedule (0x1c. × - 7.2)	Mon Tue Wed Thu Fri Sat San + R :	
Mon Tue Wed Thu Fri Sat San + Q : Weekly schedule (orto. × -7.2)	Mon Tue Wed Thu Fri Sat Sun + 12 : Weekly schedule [on to. × + 7.2]	
Mon Tue Wed Thu Fri Sat Sun + R : Weekly schedule (2x1c. × <-7.2)	Mon Tue Wed Thu Fri Sut Sun + R : Weekly schedule [0/16 × - 7.2]	
+ R : Weeky schedule (0x1c. × - 7.2)	+ R :	n Tue Wed Thu Fri Sat Sun
+ Q : Weekly schedule (ortc. × -7.2)	+ A :	
+ R : Weekly schedule (2:1c. × ← 7.2)	+ R : Weekly schedule [0:1c. × ← 7.2]	
+ R : Weekly schedule (0x1c. × - 7.2)	+ R : Weekly schedule [0:1c. × - 7.2	
Weekly achedule [or.1c. × – 7.2]	Weekly schedule (0x12. × – 7.2)	
Weekly schedule (0x1c. × – 7.2	Weekly schedule [0x1c. ×	
Weekly schedule (2x1c. × – 7.2	Weekly schedule [0x1c. × – 7.2]	
Weekly achedule [or.t × - 7.2	Weekly achedule [0x12. × - 7.2]	
Weekly schedule (ortc. × – 7.2)	Weekly schedule [0x1c. × 7.2	
Weekly achedule (0x1c. × – 7.2	Weekly achedule (0x1c. × ← 7.2	
		Weekly schedule [0x1c X
		Weekly schedule [0x1c X - 7.2
		Weekly schedule [0x1c X
		Weekly schedule (uct c X - 7.2
		Weekly achedule (0x1c X

6.1.6.2 Changing switching times

1. Select the day of the week that you want to configure.

🚯 Mon, ..., Sat or Sun



2. Open configuration of the switching time you want to change.



3. Enter start and end times (steps of 15 minutes).



or:

Delete switching times. (white button between the times)

4. Confirm configuration.



i Note

The configuration can be exited without saving it by tapping the solution.

The display of the new switching time confirms that the configuration has been saved.



Setup

5. Return to weekly schedule.

|--|



6.1.6.3 Deleting switching times

1. Select the day of the week that you want to configure.

Mon, ..., Sat or Sun

ß



2. Delete switching times.

₽ 3

3. Return to weekly schedule.

ภ	Monday	─ → 3.
	07:00 - 20:00	3 ← 2.
	ala - ala	

Creating special schedules 6.1.6.4

Special schedules allow separate switching times to be entered for certain days, for example for vacations or public holidays.

1. Open the special schedule

1. Open me special schedul	trovis661x/cgi-bin/rwZPGN	1.exe?iD=0x1c000001&ing=en	=	
€ 🔗	S	Veekly schedule	1 .	
	00 01 02 03 04 05 06 07 08 0 Mon Tue <td< td=""><td>9 10 11 12 13 14 15 16 17 18 19</td><td>20 21 22 23</td><td>0</td></td<>	9 10 11 12 13 14 15 16 17 18 19	20 21 22 23	0
2. Tap the time button to ent	trovis661x/cgi-bin/rwJahr.	exe?ID=0x1c000001&ing=en	=	
the special schedule. ଜ	Exe	reption schedule		
			← 2.	0
Configuring special use (ON	🧊 trovis661x/cgi-bin/rwJahr.e	exe?ID=0x1c000001&rw=new&l	ng=en 🗨	~
time)	Ex	ception schedule		
start date.	Special use	(ON time)		
	s	itart: 25. 7.2019	← 3.	Ĭ
		End: 25. 7.2020		⊲

Setup

4. Set the start date.



Apply start date on an annual basis, if required.

*

ß

5. Confirm configuration.



i Note

The configuration can be exited without saving it by tapping the 👩 button.

The display of the new start date confirms that the configuration has been saved.

6. Set the end date.

🖏 End ...

Set the end date as described for the start date.

7. Exit configuration.

₽

The display of the new end date confirms that the configuration has been saved.

Configuring schedule for vacations or public holidays (OFF time)

 Change from activation (ON time) to deactivation (OFF time).

Special use (ON time)

Set the date(s) for deactivation as described for activation.



9. Return to weekly schedule.



6.2 TROVIS MOBILE application with TROVIS 6610 CPU Module

The TROVIS MOBILE web application can be operated over the browser of the TROVIS 6616 Web Terminal or using a browser in the same network (PC, smartphone). The process view application must be created beforehand in the TROVIS 6690 Graphical Project Management Tool. On transferring the application, the TROVIS MOBILE web application is automatically transferred as well.

TROVIS MOBILE is started from the start screen of the TROVIS 6610 CPU Module which can be reached over the web terminal's browser.

 Start the browser to access TROVIS MOBILE and select the TROVIS 6610 CPU Module.

```
Browser
```

i Note

To go directly to TROVIS MOBILE, the start screen of the CPU module can be bookmarked [Settings/General]. Access your bookmarks by tapping the button.



Setup

 Start TROVIS MOBILE from the start screen of the CPU module.

S TROVIS MOBILE



- 3. Log onto TROVIS MOBILE.
 - 3.1 Enter password.





4. Log on.

🖧 Log on



5. Go to the required data point.

Process View

R



6.3 TROVIS MOBILE application with TROVIS 6611 Control and Automation Unit

The TROVIS MOBILE web application can be operated over the browser of the TROVIS 6616 Web Terminal or using a browser in the same network (PC, smartphone). In this case, the process view application must be created beforehand. It may consist of plain text or graphics or be a combination of both. On transferring the application, the TROVIS MOBILE web application is automatically transferred as well.

The user settings of TROVIS 6611 Control and Automation Unit determine which point of entry, access privileges and language apply to the individual user of TROVIS MOBILE.

→ User settings of TROVIS 6611 Control and Automation Unit ► EB 6611-2

6.3.1 Logon

The default settings cause the start screen of the TROVIS 6611 Control and Automation Unit to open with an unencrypted connection. We recommend setting up an encrypted connection.

Setting up an encrypted connection

1. Open the settings menu.



ß

Bookmarks





- 3. Start TROVIS 6111 MOBILE:
 - 3.1 Select 'TROVIS 6111 MOBILE LOGIN' bookmark.

R TROVIS 6111 MOBILE LOGIN



- 3.2 Press and hold the button until the screen as shown (3.2) appears.
- 4. Add shortcut to home.



- 5. Exit browser and reboot.
- 6. Register user:

ন্দি User

6.1 Enter user name.





6.3 Enter password.



6.4 Hide the keypad.



Insufficient security due to generally accessible password. Change the administrator password ('admin') after first login (see step 2 in section 6.3.2.1).

?123



6.4 -

নি

6.3.2 Configuration

You can configure the user, project and system settings in the settings

1. Open th

menu				
e settings menu.	(i)	Heat_exchanger_sequence 30.07.2019 08:07:23		
	Ē	Graphics		
		Operating modes		
	<u> </u>	Setpoints / Actual values		
		0	۵	

A https://trovis661x/pv.php

← 1.

6.3.2.1 User settings

The user settings that need to be entered include user name, password and user privileges (role).

1. Open user settings.

R User settings



30.07.2019 - 11:43

- 2. Change the administrator password after first login.
 - 2.1 Go to the user settings for the administrator.

æ admin



=

🕕 admi

2.2 Edit the password.

	-	
ß	Password	

trovis661x/usersettings.php	≅ :
User settings:	
New user	/
Password 🗲 2.2	
Rola	
user	~
Language selection	
de	~
leona	
set3	~

2.3 Change the administrator password and hide the keypad.

ß	▽
	—



2.4 Open the user settings for the administrator (admin) again and change the language (Sprachauswahl) to 'en'.



2.5 Scroll to the bottom and save the settings.

SPEICHERN

3. You can create a new user:

ß

3.1 Go to the user settings for the new user.

New user

3.2 Enter user name.

New user

3.3 Enter a new passwor Password

3.4 Hide the keypad.

ß

🕄 SAVE

0	User settings	() ad
٩		
admin admin, en, set3		
New user	← 3.1	
	-	
Attps://trovis661x/u	sersettings.php	₽
La https://trovis661x/u	sersettings.php	3
Https://trovis661x/u Benutzereinstellung: Neuer Benutzer	sersettings.php	2
https://trovis661x/u Benutzereinstellung: Neuer Benutzer - 3.1 Passwort	sersettings.php 2 3	=
https://trovis661x/u Benutzereinstellung: NeuerBenutzer - 3.: Passwort - 3.: Rode	sersettings.php 2 3	,

- 3.5 Enter other settings, if required.
 - Role (assignment of user privileges)
 - Language (language setting for a certain user)
 - Level (determining the point of entry depending on the user upon system start)

Passwort 1732		1	C
nole - 3.5		~	
Sprachauswahl - 3.5 de		~	¢
symbole 🗲 3.5		~	
Ebene Wärmetauscherfolge - 3.5	→ 3.6	~	<
	SPEICHERN	ABBRUCH	

i Note

A detailed description of user roles can be found in EB 6611-2.

3.6 Save user settings.



4. Close user settings.





6.3.2.2 System settings

System settings include the system time as well as LAN, WLAN and e-mail settings.

1. Open system settings.

System settings

a∃ tr	ovis661x/mobile.php	
	TROVIS	BILE
0	Settings	() admin
ß	User settings	Ø
	Project settings	0
හු	System settings 🗲 1.	0
	powered by SA	MSON

- 2. Configure the system time (optional):
 - 2.1 Select System time to change the time and date of the TROVIS 6611 Control and Automation Unit.

System time

- 2.2 Set date and time.
- 2.3 Save system time.







 Configure the LAN and WLAN settings (optional):

> LAN and WLAN must be configured at the user interface of the TROVIS 6611 Control and Automation Unit before start-up of the TROVIS 6616 Web Terminal EB 6611-2.

🖞 LAN and WLAN

- 4. Configure the e-mail settings (optional):
 - 4.1 Select E-mail.



O tr	C trovis661x/systemsettings.php		
	TROVISMEBILE		
0	System settings	💿 admin	
\odot	System time 30.07.2019 - 10.31.20	Ø	0
品	LAN Hostname: TROVIS-6611-2-14-5e-ab-54-00-cll, IP: 172.30.246.118/16, Gateway: 172.30.38.1	Θ	
((m))	Wi-Fi SSID: TROVIS-6611-2:14-5e-ab-54-00-c8	0	<
	powered by SAMSON	0	

O tr	ovis661x/systemsettings.php	
0	30.07.2019 - 10.31.46	
品	LAN Hostname: TROVIS-6611-2-f4-5e-ab-54-00<8, IP: 172.30.246.118/16, Gateway: 172.30.38.1	0
((m))	WI-FI SSID: TROVIS-6611-244-Se-ab-S4-00-c8	0
	E-Mail	0
9	Extended view Error	0
	powered by SAMSON	0

- 4.2 Enter the SMTP server, authentification data and sender address.
- 4.3 Activate 'SMTP authentification required'.

C trovis661x/systemsettings.php	≅ :
EMAIL SMTP - 4.2 mailout.example.com	-
Port 4.2 465	/
User 4.2 john.doe@example.com	/
Password - 4.2 secret	
Sender - 4.2 john.doe@example.com	, <
SMTP authentication required - 4.3	-

Setup

- 4.4 Configure the TLS settings for an encrypted data transfer.
- 4.5 Scroll downward.
- 4.6 Save e-mail settings.

€	SAVE
---	------

trovis661x/systemsettings.php	≡ :	
APN	1	۵
MAL - 4.5	1	
User	_ ,	¢
Password	,	
PPPD 0.0.0.0.0.0.0 modern ock noauth noipdefault nodeflate noaccomp noi	iovj r 🥒	<
SAVE	CANCEL	

6.3.2.3 Project settings

Project settings include the collective error message, Modbus TCP settings and MQTT and OPC UA interfaces.

1. Select Project settings.

ß	Project	settings
---	---------	----------

- 2. Configure the collective error message:
 - 2.1 Select Collective error message.

Collective error message

2.2 Enter profile based on the configuration of the SSM function block.



Setup

- 2.3 Scroll downward.
- 2.4 Save settings.
 - SAVE



- 3. Configure Modbus TCP:
 - 3.1 Select Modbus TCP.





- 3.2 You can protect the connection through AES encryption by assigning a password.
- 3.3 Select the Modbus station number you want to configure.

trovis661x/modbustcp.php	≡ :
TROVISMOBIL	5
C Modbus TCP settings	() admin
Save	0
AES	0
4 → 3.3 4 127.0.1 4	0 <
powered by SAMSON	

3.4 Enter the IP address of https://trovis661x/modbustcp.php = : the gateway (TCP or Modbus-TCP-Einstellungen SAM HOME) in use. 3.5 Hide the number pad. Modbus Stationsnummer: 4 Host Adresse/Namen **←** 3.4 172.30.39.210 ß ∇ 0 1 2 3 4 5 6 7 8 9 0 % (@ # € & =+) ? 3.5 -> = \ < 1 1 1 ∇ ABC 3.6 Save configuration. trovis661x/modbustcp.php ŝ ß SAVE Modbus TCP settings MODBUS Station number: 4 Host address/names 172.30.39.210 AES 3.6 DELETE SAVE CANCEL \triangleleft owered by SAMSON 3.7 Scroll downward. trovis661x/modbustcp.php ĨĨ Modbus TCP settings 3.8 Save Modbus TCP set-Save tings. Ø ß Save AES **→** 3.7 Θ 0 4 172.30.39.210 Ø **←** 3.8 Save Ø \triangleleft powered by SAMSON

6.3.3 Operation

The point of entry for the identical user application may differ depending on the user settings. The examples on the right show two examples of different points of entry:

- Point of entry for a user with 'admin' privileges. The normal point of entry is the top 'roots' level.
- Point of entry for a user with a plant scheme as start screen.





6.3.3.1 Historical data

1. Open historical data.

🚯 Historical data

💁 hi	tps://trovis661x/pv.php		≣ :	
0	30.07.2	019 - 15:16	💿 admin	
(j)	Heat_exchanger_sequence 30.07.2019 15:03:15			
	Graphics			C
Ē	Operating modes			
<u> </u>	Setpoints / A 🚽 1. es			<
	Nistorical data	(2) Messages		

2. Select Selection button to select a data point.

Selection

3. Select data point.

- ALG_AT_AE Außentemperatur
 3.

 HK1_RL_AE HK1 RL-Temp
 3.

 HK1_VL_AE HK1 VL-Temp
 3.

 MA1_SOLL-GES Akt Soll gesamt
 0

 MA1_SOLL-GES Akt Soll gesamt
 0

 MA1_SOLL-GES Akt Soll gesamt
 0

 RL_WT_Simulation RL_WT_Simulation
 4



3.2 Scroll upward in the graph to read the historical data.



4. Select the display range.







5. Close historical data.





6.3.3.2 Error messages

Active error messages are indicated by the red 'Messages' button. The number of active error messages is indicated on the right of the button.

- 1. Tap the Messages button to read the error messages.
 - A Messages
 - 1.1 You can refresh the display of error messages.

Automatic updates

1.2 You can read the error message history.

A Monitoring

1.3 You can clear the error message history.

🖧 Clear

1.4 You can return to the list of error messages.

Error messages

2. Close messages.





6.3.3.3 Schedules

i Note

Schedules can only be opened from the menu structure and not from the graphic.

 Scroll down (1.1) and select the time schedule you want to edit (1.2).





2. You can read the switching times.



2.1 Exit overview of switching times.

Ł	OK
52	OK



- You can add switching times: A maximum of 35 switching times per week can be configured.
 - 3.1 Create a new entry in the 'Weekly schedule'.

🖞 New entry

3.2 Set week day.



powered by SAMSON

 \triangleleft

- 3.3 Set start time.
- 3.4 Go to the end time.

🖧 End

A red End button indicates that the end time entry is active

- 3.5 Set end time.
- 3.6 Confirm switching time.

ஃ_ ОК

- 4. You can change switching times:
 - 4.1 Select the switching time you want to change.
 - 4.2 Proceed as described in steps 3.3 to 3.6.
- 5. You can delete switching times:
 - 5.1 Select the switching time you want to delete.





		₽	÷		
0		HC1 schedule			
Weekly	schedule				
	Overview	← 5.1			
\odot	Monday 05:22 - 23:59				0
÷	New entry				
Yearly s	chedule				\triangleleft
powered by SAMSON					

Ĩ

0

⊲

5.2 Delete switching times. A https://trovis661x/pv.php#PageChange Ĩ HC1 SCHEDULE MONDAY ß DELETE End 11:59 PM 03 20 04 21 22 06 23 07 ₹ 5.2 CANCEL \triangleleft DELETE SET

Yearly schedule

ß

The yearly schedule allows separate switching times to be entered for special use, for example for vacations or public holidays. The special schedule can be a one-off event or repeated on an annual basis. In the following example, a special schedule is to be set for the Christmas holiday.

1. Create a new entry in the 'Yearly schedule'.

New entry

Overview	
Monday 05/22-23/59	
New entry	
Yearly schedule	

Dowered by SAMSON

-

A https://trovis661x/pv.php#PageChange

Setup

2. Set annual repetition of the special schedule.

🖞 Date range Annually

3. Confirm setting.

ද_ SET

- Interpret/trovis661x/px,ph#PageChange
 Interpret/trovis6
- 4. Set special schedule.

S Vacation, public holidays (OFF time)

5. Confirm setting.

🖧 SET



6. Set start date (day and month).



7. Change to time.

🖧 TIME

8. Set start time (hour and minutes).



9. Go to the end date.

The End button is red.

- 10. Set end date and time.
- 11. Proceed as described in steps 7 and 8.
- 12. Confirm special schedule.

🖧 SET



7 Servicing

i Note

The web terminal was checked by SAMSON before it left the factory.

- The product warranty becomes void if service or repair work not described in these instructions is performed without prior agreement by SAMSON's After-sales Service department.

- Only use original spare parts by SAMSON, which comply with the original specifications.

7.1 Cleaning the screen

1. Open the TouchBlocker on the second page of the Launcher.

A 60-second countdown begins to allow you to clean the screen without it reacting to touch.

i Note

Press **r** to display the Touch-Blocker running in the background.





2. It is possible to display Touch-Blocker in the background.





3. Exit TouchBlocker.





7.2 Preparation for return shipment

A defective web terminal can be sent to SAMSON for repair.

Proceed as follows to return devices to SAMSON:

- 1. Decommission the web terminal.
- 2. Send the web terminal to your nearest SAMSON subsidiary. SAMSON subsidiaries are listed on our website at ▶ www.samson.de.

8 Malfunctions

→ Troubleshooting (see Table 1)

i Note

Contact SAMSON's After-sales Service department for malfunctions not listed in the table.

9.2 Disposal



We are registered with the German national register for waste electric equipment (stiftung ear) as a producer of electrical and electronic equipment, WEEE reg. no.: DE 62194439

- ➔ Observe local, national and international refuse regulations.
- → Do not dispose of components, lubricants and hazardous substances together with your other household waste.

∹∑- Tip

On request, we can appoint a service provider to dismantle and recycle the product.

9 Decommissioning and removal

9.1 Decommissioning

- 1. Disconnect the web terminal from the supply voltage.
- 2. Remove the web terminal.

Table	1:	Troubleshooting
-------	----	-----------------

Error	Possible reasons	Recommended action
Screen remains black.	No or incorrect supply voltage connected.	Check the supply voltage and connections (see section 5.2).
System components do not perform the required actions.	No Ethernet connection to the TROVIS 6610 CPU Module/ TROVIS 6611 Control and Automation Unit.	Check Ethernet and IP address (see section 5.3).
TROVIS MOBILE web server cannot be used.	Network settings are incorrect.	Check settings and change, if necessary (see section 6.2 and section 6.3).

10 Appendix

10.1 After-sales service

Contact SAMSON's After-sales Service department for support concerning service or repair work or when malfunctions or defects arise.

E-mail address

You can reach the After-sales Service Department at aftersalesservice@samson.de.

Addresses of SAMSON AG and its subsidiaries

The addresses of SAMSON, its subsidiaries, representatives and service facilities worldwide can be found on our website (www.samson.de) or in all product catalogs.

Required specifications

Please submit the following details:

- Order number and position number in the order
- Type, serial number, firmware version, device version

10.2 Certificates

The declaration of conformity is provided on the next page.

SMART IN FLOW CONTROL.



EU Konformitätserklärung/EU Declaration of Conformity/ Déclaration UE de conformité

Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller/ This declaration of conformity is issued under the sole responsibility of the manufacturer/ La présente déclaration de conformité est établie sous la seule responsabilité du fabricant. Für das folgende Produkt/For the following product/Nous certifions que le produit

Web-Terminal / Web Terminal / Web-Terminal Typ/Type/Type TROVIS 6616

wird die Konformität mit den einschlägigen Harmonisierungsrechtsvorschriften der Union bestätigt / the conformity with the relevant Union harmonisation legislation is declared with/ est conforme à la législation d'harmonisation de l'Union applicable selon les normes:

EMC 2014/30/EU

LVD 2014/35/EU

RoHS 2011/65/EU

+A1:2015, EN 61000-6-2:2005 EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+AC:2011+A2:2013 EN 50581:2012

EN 55022:2010, EN 55024:2010

EN 55022:2010 Klasse B.

Hersteller / Manufacturer / Fabricant:

SAMSON AKTIENGESELLSCHAFT Weismüllerstraße 3 D-60314 Frankfurt am Main Deutschland/Germany/Allemagne

Frankfurt / Francfort, 2017-07-29 Im Namen des Herstellers/ On behalf of the Manufacturer/ Au nom du fabricant.

j.V. bert Naller

Gert Nahler Zentralabteilungsleiter/Head of Department/Chef du département Entwicklung Automation und Integrationstechnologien/ Development Automation and Integration Technologies

SAMSON AKTIENGESELLSCHAFT Weismüllerstraße 3 60314 Frankfurt am Main

IV. H. Erge

Hanno Zager Leiter Qualitätssicherung/Head of Quality Managment/ Responsable de l'assurance de la qualité

Telefon: 069 4009-0 · Telefax: 069 4009-1507 E-Mail: samson@samson.de Revison 07

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Appendix

Appendix

Password

1732

EB 6616 EN



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