SIEMENS

SIMATIC

HMI devices
Comfort Panels INOX, ITC INOX

Compact Operating Instructions

08/2022

A5E33472156-AP

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

⚠ DANGER

indicates that death or severe personal injury **will** result if proper precautions are not taken.

⚠ WARNING

indicates that death or severe personal injury **may** result if proper precautions are not taken.

⚠ CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

⚠ WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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Preface

Scope of validity

These compact operating instructions apply to the following devices which are based on the following standard devices:

INOX device	Basic device
TP700 Comfort INOX, article number 6AV2144-8GC10-0AA0	TP700 Comfort V1
TP900 Comfort INOX, article number 6AV2144-8JC10-0AA0	TP900 Comfort V1
TP1200 Comfort INOX, article number 6AV2144-8MC10-0AA0	TP1200 Comfort V1
TP1200 Comfort INOX LF, article number 6AV2144-8MC10-0AC0	TP1200 Comfort V1
TP1500 Comfort INOX, article number 6AV2144-8QC10-0AA0	TP1500 Comfort V1
TP1500 Comfort INOX, article number 6AV2144-8QC10-0AA1	TP1500 Comfort V2
TP1500 Comfort INOX, article number 6AV2144-8QC10-0AA2	TP1500 Comfort V2
TP1900 Comfort INOX, article number 6AV2144-8UC10-0AA0	TP1900 Comfort V1
TP1900 Comfort INOX, article number 6AV2144-8UC10-0AA1	TP1900 Comfort V2
ITC1900 INOX, article number 6AV6646-8AC10-0AA0	ITC1900

These compact operating instructions describe the technical differences between the INOX devices and the corresponding basic devices.

The notes in these compact operating instructions take precedence over statements in the basic operating instructions, the release notes and online help.

Comfort Panels operating instructions
(http://support.automation.siemens.com/WW/view/en/49313233)

Industrial Thin Clients operating instructions
(http://support.automation.siemens.com/WW/view/en/61187980)

Unless otherwise described in this document, all of the statements made in the general operating manual concerning the basic device are valid for the corresponding INOX device. This means the statements on hardware, operating system, software, configuration, maintenance, and servicing.

Note

This document belongs to the device and will also be required for repeat commissioning. Keep all supplied and supplementary documentation for the entire service life of the device.

Pass on all of these documents to a future owner of the device.

Style conventions

Style Convention	Scope
"Add screen"	• Terms that occur in the user interface, for example, dialog name, tab, button, menu command • Necessary entries, for example, limit value, tag value • Path specification
"File > Edit"	Operating sequences, for example, menu item, shortcut menu command
<F1>, <Alt+P>	Designation of a key on a keyboard

You should also observe notes that are marked as follows:

Note

A note contains important information about the product described in the document and its handling, or a specific section of the document to which you should pay particular attention.

Naming conventions

Term		Applies to
System		• System • Machining center • One or more machines
INOX device, HMI device	Comfort INOX device	• TP700 Comfort INOX • TP900 Comfort INOX • TP1200 Comfort INOX • TP1200 Comfort INOX LF • TP1500 Comfort INOX [1] • TP1500 Comfort INOX [2] • TP1900 Comfort INOX [1] • TP1900 Comfort INOX [2]
	ITC INOX device	• ITC1900 INOX

[1] Based on the corresponding Comfort V1 device.

[2] Based on the corresponding Comfort V2 device.

Unless otherwise specified, "TP1500 Comfort INOX" and "TP1900 Comfort INOX" apply to the entire basis V1 and V2.

Figures

This document contains illustrations of the described devices. The figures can deviate from the particularities of the delivered device.

Table of contents

Overview

1

1.1 Product overview

INOX devices with touch screen and stainless steel front are designed for use in the food and beverage industry, including in splash zones of food production, the pharmaceutical industry, fine chemicals and in other hygiene areas for machine-level operator control and monitoring. For this reason, the devices with stainless steel front have been developed in compliance with DIN EN 1672-2 "Food processing machinery – Safety and Hygiene Requirements".

- The external dimensions of the front and mounting cutout are the same as for the standard product
- Optimized rack design with slight projections to the cabinet and for allowing liquids to run off
- Simpler cleaning thanks to resistant and rugged stainless steel front with smooth surface and minimal grooves and gaps
- IP66K degree of protection [1] on the front for increased tightness and ruggedness
- Stainless steel surface polished with grain size 240
- Decorative foil tested against chemicals
- Display splash protection
- Food-grade mounting gasket, exchangeable
- Rear clamping frame for even application pressure of the mounting gasket

[1] For use in hazardous areas of Zones 2 and 22: on the front at least IP65, see section "Technical specifications (Page 41)".

1.2 Scope of delivery

Depending on the order, the scope of delivery includes:

- 1 × device
- 1 × accessory pack with the following contents:
  - 1 mounting gasket
  - 1 clamping frame
  - 1 power supply terminal
  - 1 strain relief plate (only for TP700 Comfort INOX)
  - Mounting clips: depending on the display size generally:

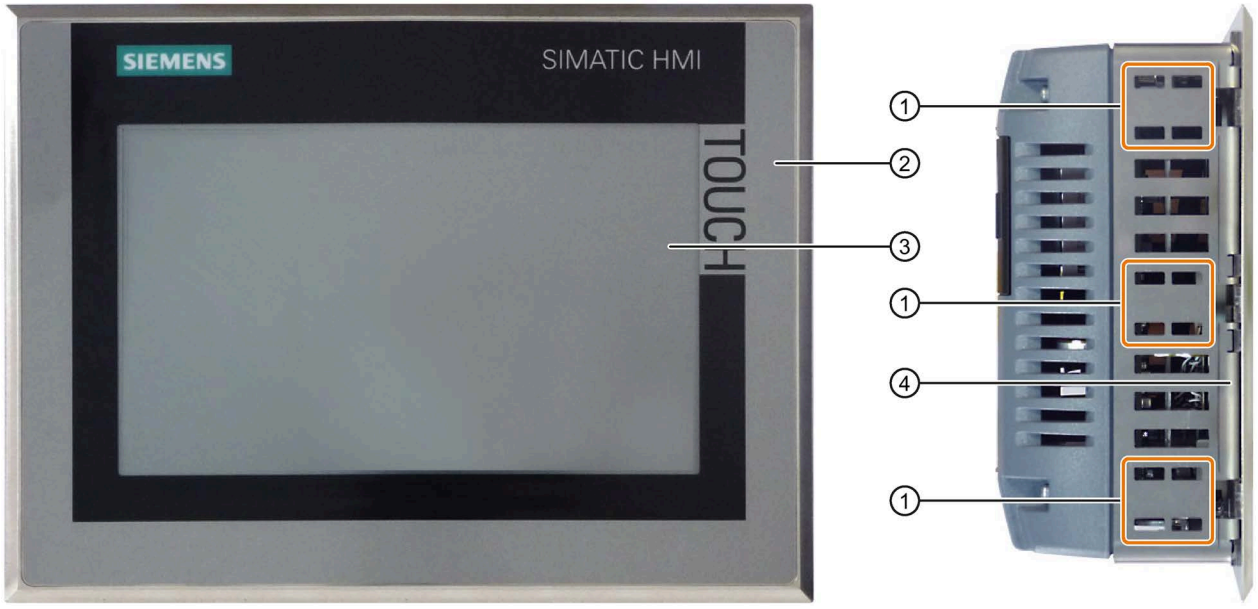
Display size	Number of mounting clips
7" devices	10
9" devices	13
12" devices	12
15" devices	20
19" devices	18

- 1 × "Comfort Panels INOX, ITC INOX" product information

1.3 Layout of the devices

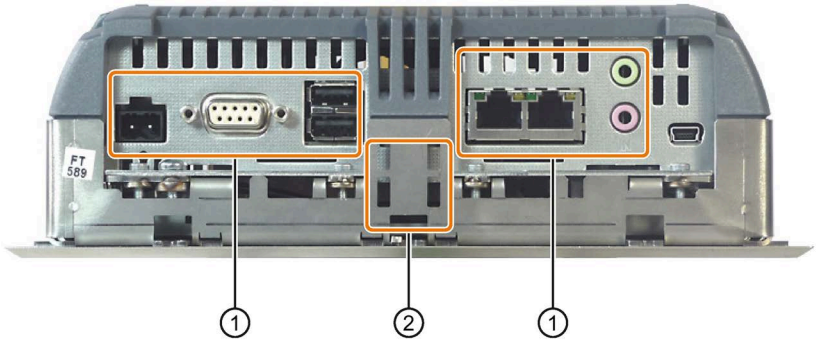
The figures in this chapter show the layout of the INOX devices using the TP700 Comfort INOX as an example.

Front view and side view



① Cutout for mounting clip
② Stainless steel front
③ Display with touch screen
④ Mounting gasket

Bottom view



① Ports
② Cutout for mounting clip

1.4 Interfaces

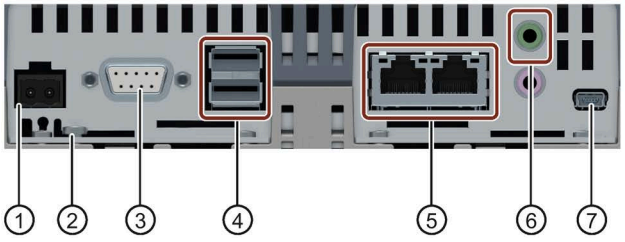
Interfaces for the 7", 9" and 12" HMI devices

The figure below shows the interfaces for the following HMI devices:

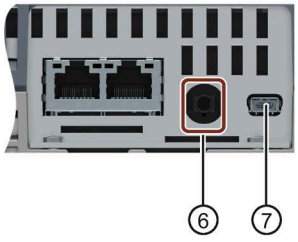
- TP700 Comfort INOX
- TP900 Comfort INOX
- TP1200 Comfort INOX
- TP1200 Comfort INOX LF

The devices based on the corresponding Comfort Panels V1 devices.

Comfort Panels V1



Comfort Panels V1.1



① X80 power supply connector
② Connection for equipotential bonding (ground)
③ X2 PROFIBUS (SUB-D RS422/485)
④ X61 / X62 USB type A
⑤ X1 PROFINET (LAN), 10/100 Mb
⑥ X90 Audio Line OUT
⑦ X60 USB type Mini B

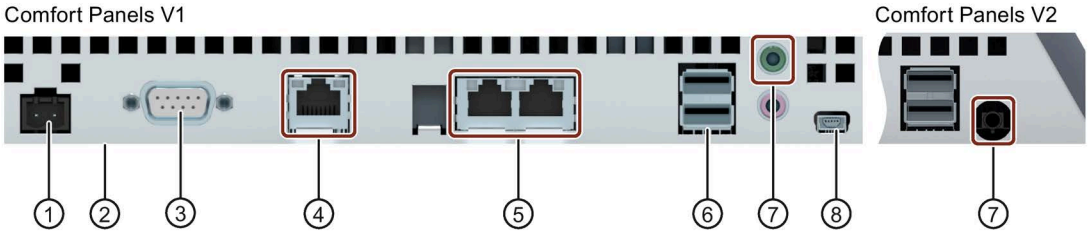
Interfaces for the 15" and 19" HMI devices

The figure below shows the interfaces for the following HMI devices:

- TP1500 Comfort INOX [1]
- TP1500 Comfort INOX [2]
- TP1900 Comfort INOX [1]
- TP1900 Comfort INOX [2]

[1] Based on the corresponding Comfort Panels V1 device.

[2] Based on the corresponding Comfort Panels V2 device.



① X80 power supply connector
② Connection for equipotential bonding (ground)
③ X2 PROFIBUS (SUB-D RS422/485)
④ X3 PROFINET (LAN), 10/100/1000 Mb
⑤ X1 PROFINET (LAN), 10/100 Mb
⑥ X61 / X62 USB type A
⑦ X90 Audio Line OUT
⑧ X60 USB type Mini B

Additional information

Use the X1 or X60 interface to connect a configuration PC. Use the X61 / X62 interfaces to connect peripheral devices such as a printer or keyboard. Use the X90 interface to connect an audio device.

You can fasten the USB and PROFINET connecting cables to the rear panel of the HMI device with cable ties.

On the TP700 Comfort INOX you secure the cables with a separate strain relief plate. Install the strain relief on the HMI device.

1.5 Accessories

Accessories can be ordered on the Internet at:

Industry Mall (https://mall.industry.siemens.com)

The following service packs with clamping frames, mounting gaskets, mounting clips and strain relief plate are available for the INOX devices:

- TP700 INOX Service Pack, article number 6AV2185-4GA00-0AX0
- TP900 INOX Service Pack, article number 6AV2185-4JA00-0AX0
- TP1200 INOX Service Pack, article number 6AV2185-4MA00-0AX0
- TP1200 INOX LF Service Pack, article number 6AV2185-4MA01-0AX0
- TP1500 INOX Service Pack [1], article number 6AV2185-4QA00-0AX0
- TP1900 Comfort INOX Service Pack [1], ITC1900 INOX Service Pack, article number 6AV2185-4UA00-0AX0

[1] The Service Pack is valid for the entire basis V1 and V2 of the Comfort Panels INOX.

Safety instructions 2

2.1 General safety instructions

Installation according to the instructions

⚠ WARNING

The device may only be used in machines which comply with the Machinery Directive

The "Machinery Directive" governs, among other things, the precautions to be taken when commissioning and operating machines within the European Economic Area.

Failure to follow these precautions is a breach of the Machinery Directive. Such failure may also cause personal injury and damage depending on the machine operated.

The machine in which the HMI device is to be operated must conform to Directive 2006/42/EC.

Notes on the touch screen

⚠ WARNING

Risk of explosion, personal injury or material damage in the case of a defective touch screen

The application of excessive force to the device front can destroy the device touch screen, for example, piercing the front membrane or breaking the touch screen carrier plate. There is a risk of explosion, injury and food contamination with additional consequential and health damage.

Make sure that excessive force cannot be applied to the device front.

If the device touch screen is defective, decommission the affected machine immediately and replace the device at once. When replacing the device, please note the chapter "Installing and connecting the device (Page 13)".

Note

Wrinkles on the touch screen

Wrinkles may form on the touch screen decorative foil under extreme climatic conditions. This will not affect the operability of the touch screen and does not represent a deficiency in quality.

ESD

Electrostatically sensitive components include almost all electrical, electronic, optoelectronic and electromechanical components. These components are sensitive to overvoltage for technical reasons and their function may be impaired or destroyed by electrostatic discharge. Observe the regulations governing the handling of ESD components.

2.2 Notes on use

Note

Avoid direct or indirect contact with food in the area of the device's decorative foil to avoid possible cross contamination.

2.3 Supplemental notes

Configuration

A SIMATIC Comfort INOX HMI device is configured in the TIA Portal in the same way as the corresponding basic device with its article number (MLFB), see section "Scope of validity" in the preface.

To configure a SIMATIC Comfort INOX HMI device in WinCC (TIA Portal), select the appropriate INOX HMI device in the TIA catalog and place it in your project.

Installing and connecting the device

3

3.1 Mounting instructions

The technical specifications given for the device are guaranteed under these conditions:

- The device is installed by qualified personnel.
- Installation takes place according to the available documentation.

3.2 Preparing for installation

3.2.1 Check the scope of delivery

Check the scope of delivery for visible signs of damages caused during transport and for completeness, see chapter "Scope of delivery (Page 8)".

NOTICE
Damaged parts
A damaged part can cause device malfunctions.
Do not install damaged parts.

In the case of damaged parts or incomplete delivery, contact your Siemens representative.

3.2.2 Checking the operating conditions

Note the following aspects before installing the device:

1. Familiarize yourself with the standards, approvals, EMC parameters and technical specifications for operation of the device. This information is available in the following chapters:
   – "Certificates and approvals (Page 26)"
   – "Electromagnetic compatibility (Page 32)"
2. Check the mechanical and climatic ambient conditions for operation of the device; see Classification of environmental conditions (Page 43).
3. Follow the notes on use in the operating instructions.

3.2.3 Selecting a mounting position

The HMI device is suitable for installation in:

- Mounting cabinets
- Control cabinets
- Switchboards
- Consoles

In the following, all of these mounting options are referred to by the general term "cabinet".

The HMI device is self-ventilated and approved for inclined mounting at angles of up to +/-35° in stationary cabinets.

NOTICE
Damage due to overheating An inclined installation reduces the convection by the HMI device and therefore the maximum permitted ambient temperature for operation. If there is sufficient convection from forced ventilation, the HMI device can also be operated in the inclined mounting position up to the maximum permitted ambient temperature for vertical installation. The HMI device may otherwise be damaged and its certifications and warranty will be void.

Note

Extended inclination and ambient temperature range

You can operate 7" to 15" devices with extended inclination and extended temperature range under the following conditions:

- The USB load does not exceed 100 mA per USB port.
- The +24 V DC connection of the PROFIBUS interface is not used.
- The relative atmospheric humidity behaves according to the climate diagram (Page 48) in combination with the information on ambient temperature and relative humidity in the technical specifications, see section "Classification for stationary and weather-protected use (Page 45)".

The following mounting positions and temperature ranges are permitted under the specified conditions:

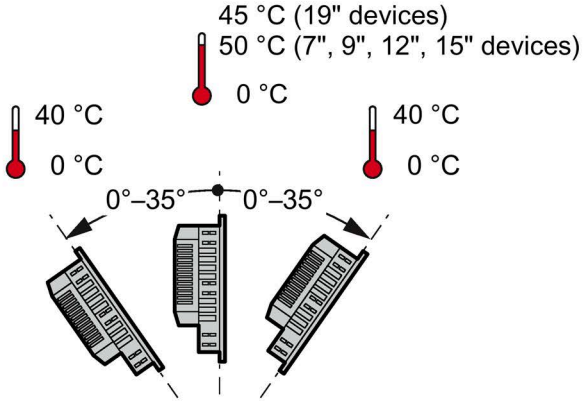
- Vertical landscape mounting with a maximum ambient temperature of +55 °C
- Landscape mounting with an inclination of up to 35° from the vertical with a maximum ambient temperature of 40 °C

Mounting position

Select one of the approved mounting positions for your HMI device. The approved mounting positions are described in the following sections using the TP700 Comfort INOX as an example.

Landscape mounting

All HMI devices are suitable for landscape mounting.

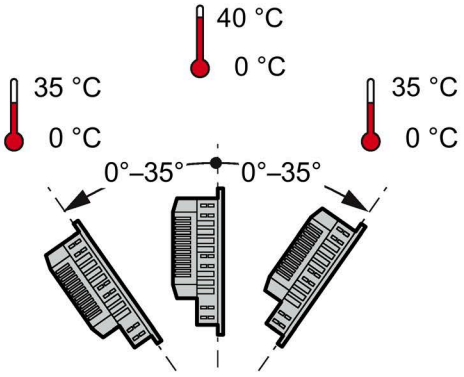


A maximum ambient temperature of +50 °C is permitted for vertical mounting (0° tilt angle); a maximum of +40 °C is permitted for inclined mounting.

The ambient temperature for the 19" devices when installed vertically should not exceed +45 °C.

Portrait mounting

The Touch HMI devices are also suitable for portrait mounting. Select the appropriate screen format during configuration.



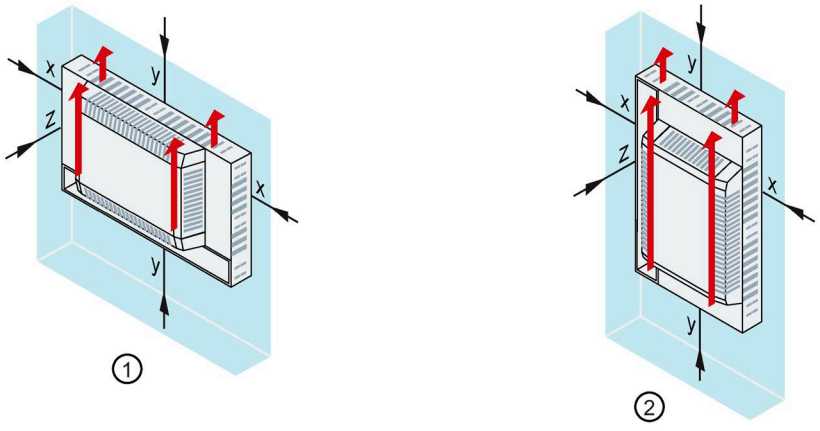
A maximum ambient temperature of +40 °C is permitted for vertical mounting (0° tilt angle); a maximum of +35 °C is permitted for inclined mounting.

3.2.4 Checking clearances

The following clearances are required around the HMI device to ensure sufficient self-ventilation:

- At least 23 mm to the right and to the left of the mounting cutout (in the x direction) for mounting the clamping frame during installation
- At least 50 mm above and 50 mm below the mounting cutout (in the y direction) for ventilation
- At least 10 mm behind the rear panel of the HMI device (in the z direction)

The following figure shows the clearances during mounting of the HMI devices in horizontal and vertical formats:



① Clearance for installation in landscape format
② Clearance for installation in portrait format
x Distance from wall at least 23 cm.
y At least 50 mm distance
z At least 10 mm distance

Note

Ensure that the maximum ambient temperature is not exceeded when mounting the device in a cabinet and especially in a closed enclosure.

3.3 Inserting the mounting seal

The following figures in this section are examples.

To prevent the mounting seal from being inserted in the wrong direction, it has an asymmetric coding tap. On all mounting gaskets of the INOX devices, the coding tap is on the bottom left in relation to the rear of the device.

Note

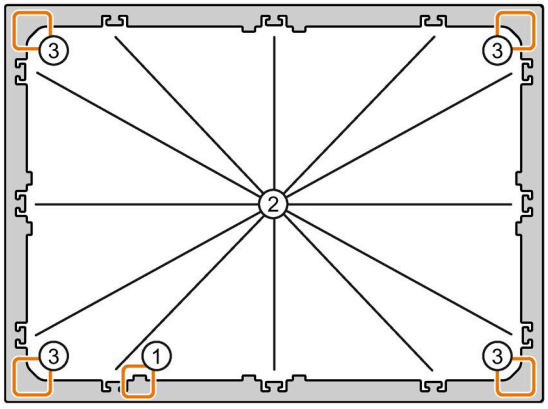
Use a new mounting seal for each installation, because the promised degree of protection cannot be guaranteed otherwise.

Requirement

- Remove all packaging components and the edge protection tape prior to installation.

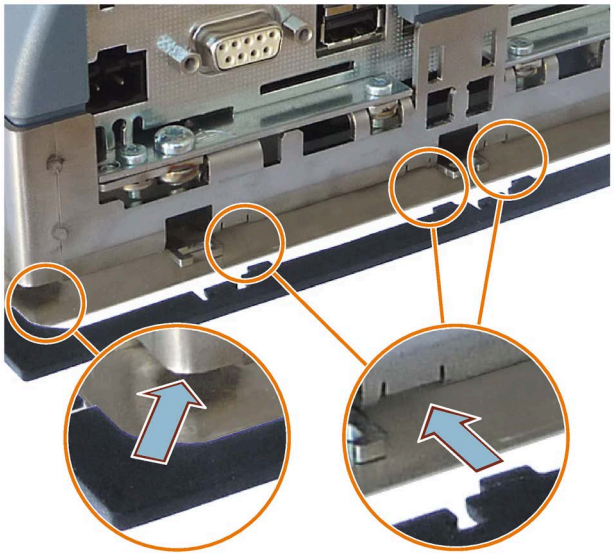
Procedure

1. Look for the coding tap on the mounting seal. Turn the mounting seal so that the coding tap is on the bottom left as seen in the figure below:

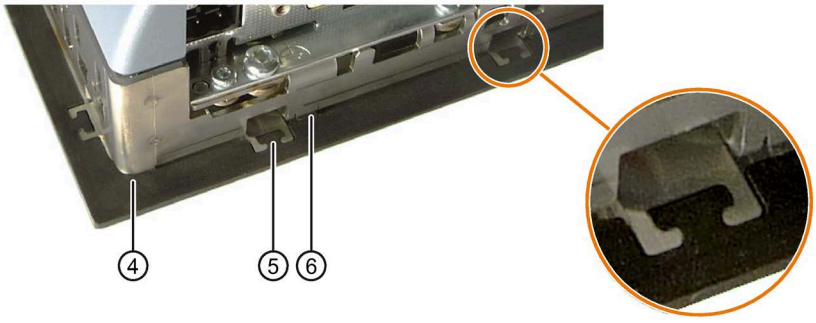


① Coding tap
② Positioning hooks
③ Seal corner

2. Carefully place the device on the front of the device (interfaces point to you).



3. Insert the mounting seal into the stainless steel front as shown. Also note points ④ - ⑥.



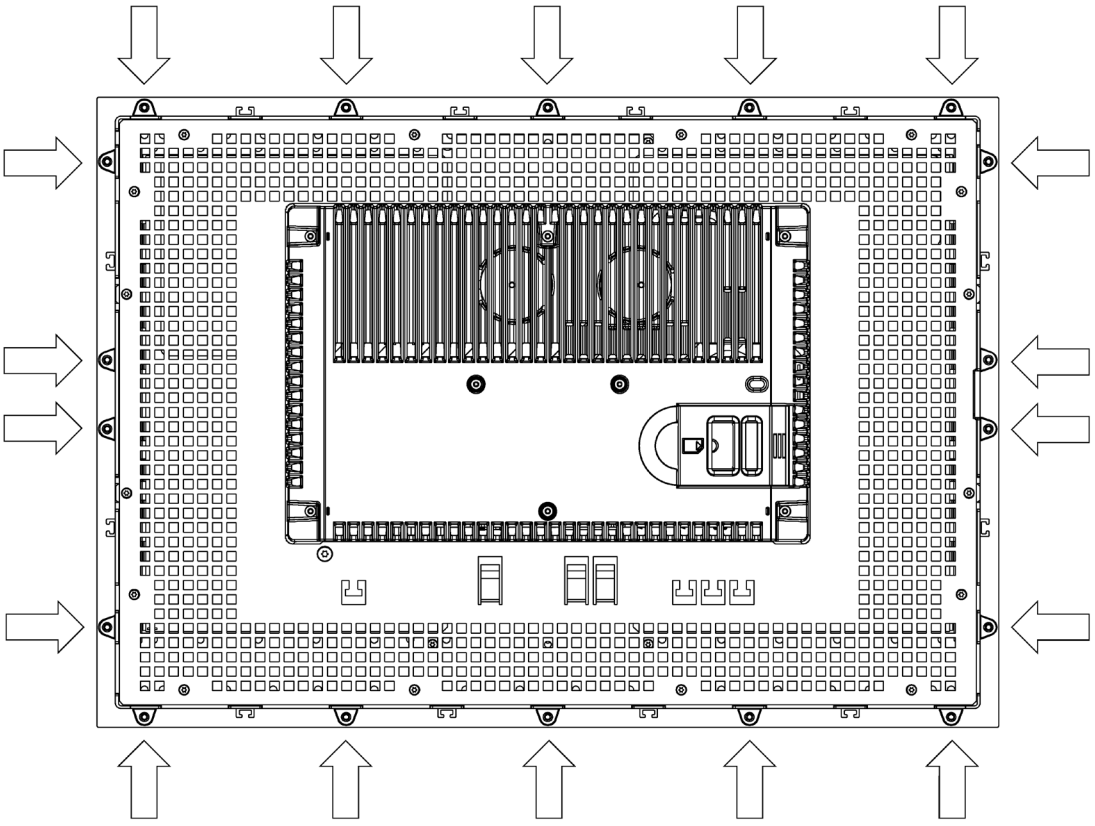
④ Seal corner is underneath the housing frame.
⑤ The positioning hook of the seal fully engages into the cut-out, flat without protrusion.
⑥ The coding key lies flat in the intended cut-out.

4. Check the correct fit of the mounting seal:
   – The coding tap is placed at the specified location.
   – All positioning hooks rest flush in their cutouts. The mounting seal is installed correctly when it lies flat on the entire stainless steel front. This must not lead to distortions and protrusions.

     If necessary, correct the seat: To do this, press the mounting seal into the recess.
   – The edge of the mounting seal is flush with the edge of the stainless steel front all around.

3.4 Positions of the mounting clips for TP1900 Comfort INOX and ITC1900 INOX

The following section describes how you can install the device. Observe the following mounting clip positions for the TP1900 Comfort INOX and the ITC1900 INOX:



3.5 Mounting the device

The following process describes installation for all devices based on the example of the TP700 Comfort INOX.

Requirement

- 1 clamping frame
- 1 Allen key 2.5 mm
- Mounting clips: depending on the display size generally:
  - 7" devices: 10 mounting clips
  - 9" devices: 13 mounting clips
  - 12" devices: 12 mounting clips
  - 15" devices: 20 mounting clips
  - 19" devices: 18 mounting clips

Observe the additional product information, if any, supplied with the product.

Mounting

CAUTION

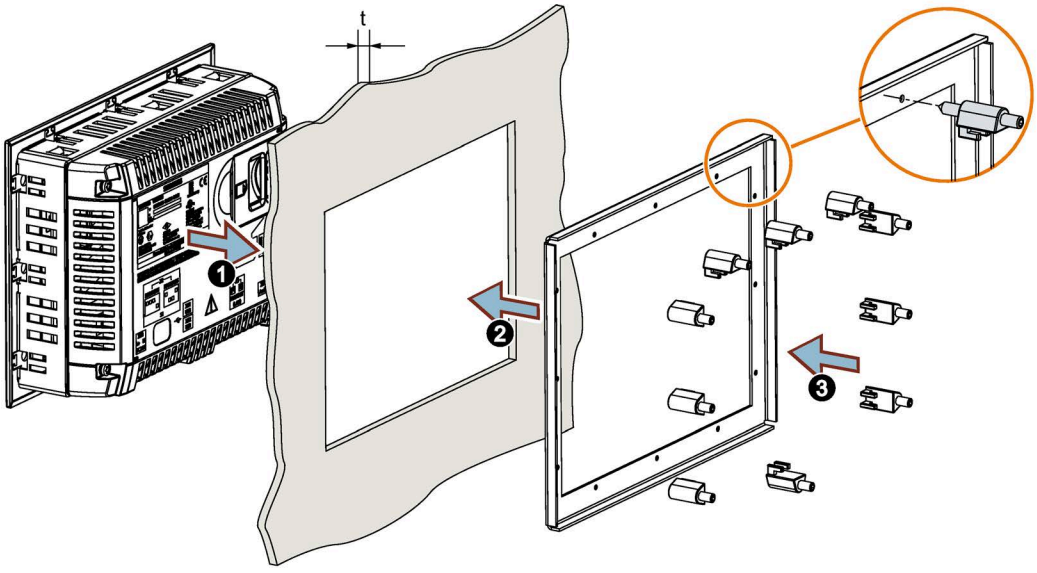
Risk of injury when device falls

An unsecured device may fall. This can result in damage to persons, machines and the device.

Secure the device against dropping during the entire installation.

1. Insert the device with its mounting seal, clamping frame and all enclosed mounting clips into the mounting cut-out from the front, as shown in the figure.

   The tip of the setscrew must be inserted into the center hole as shown in the zoomed section of the figure.



Material thickness **t** at the mounting cutout:

- With 7, 9, and 12" devices: 1.5 mm to 6 mm
- With 15" and 19" devices: 1.5 mm to 5 mm

2. Turn the setscrew of each mounting clip until a slight clamping force is perceptible. After a few rotations a slight resistance will become perceptible. When the increase in force is perceptible, tighten the setscrew of the next mounting clip. Perform this step for all setscrews.
3. Check that the mounting seal is properly seated.
   - The edge of the mounting seal must be flush and evenly flush with the stainless steel front on all sides.
   - The edge may protrude 0.1 to 0.5 mm.
4. Tighten the setscrew of the mounting clip until the fixed stop is reached and the torque increases perceptibly. The tightening torque is then:
   - With 7, 9, and 12" devices: approx. 1.0 Nm
   - With 15" and 19" devices: approx. 0.5 Nm

5. Check that the stainless steel front is in contact with the mounting location on all sides and that the mounting seal is pressed against the surrounding area.
6. Check that the fixed stop has been reached on all mounting clips and that the mounting gasket is installed correctly. Correct the tightening torque, if necessary, so that the clamping force is evenly distributed.

Removal

For removal, follow the steps for installation in reverse order. Dispose of the used mounting gasket.

3.6 Connecting the device

The specifications in the relevant operating instructions apply.

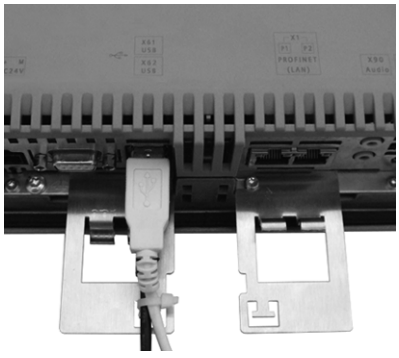
Please also note the following information.

Connection in hazardous areas

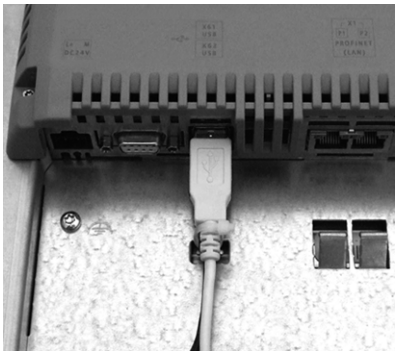
⚠ WARNING
Explosion hazard
The audio connectors are only designed for temporary connection.
Do not use, connect or disconnect until the device is in a non-hazardous area.
Connecting or disconnecting in a hazardous environment could cause an explosion.

Securing cables

After connecting the USB cables, secure them to the corresponding fixing elements using the cable ties.



TP700 Comfort INOX



TP900 Comfort INOX
TP1200 Comfort INOX
TP1500 Comfort INOX
TP1900 Comfort INOX, ITC1900 INOX

3.7 Securing cables for use in hazardous areas

When devices with Ex approval are used in hazardous areas, note that the connectors must be secured in a captive manner at the interfaces.

WARNING

Explosion hazard from sparks when connectors come loose

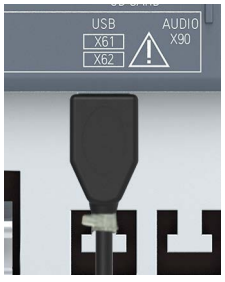
If a plug connector comes loose from the associated device interface during operation in a hazardous area, a spark over at the interface may cause an explosion. Death or serious physical injury as well as property damage may result.

For use in hazardous areas, it must be ensured that the plug connectors of the cables are fully connected to the respective interface and cannot come loose from the interfaces in any case. For SIMATIC HMI Comfort Panels, this risk only exists at the USB interfaces.

Secure all connected USB cables directly at the transition between connector and cable to the nearest mounting element using a cable tie. Tighten up all cable ties in such a way that they fully wrap around the respective cable but do not damage the cable.

For securing the connected USB cables, use the appropriate mounting elements, as described in the previous chapter.

The following figure shows an example of how to secure a USB connector in a captive manner.



Cleaning the device

4

4.1 Cleaning product

The specifications in the operating instructions apply when using the device in hazardous areas of Zones 2 and 22.

For use of the device at normal atmospheric conditions, the following is permitted in addition to the operating instructions:

- Cleaning with strong jet water under increased pressure

  On front IP66K in accordance with DIN 40050, Part 9

4.2 Clean screen for Touch HMI devices

This chapter is valid for the Comfort INOX HMI devices.

The touch screen of the HMI device can be cleaned when it is switched on and a project is running. An operating element must be available in the project that can be used to call the "clean" screen. Once the clean screen is activated, touch screen operation is locked for a configured period of time. The time the touch screen is locked can be set between 5 and 30 seconds. The time remaining for the lockout is indicated by a progress bar.

Note

Unintentional responses

When cleaning the touch screen, an unintentional response in the controller can be triggered by touching keys.

Always open the clean screen or switch off the HMI device before you clean the touch screen while the system is running.

Cannot be operated when the clean screen is active

When the clean screen is active, operations on the HMI device are not possible.

Wait for the period of the clean screen to lapse. Then you can operate the system again with the HMI device.

No clean screen with HMI devices with touch screen and function keys

The clean screen is not available for HMI devices with touch screen and function keys. In this case, configure a screen without operating elements, for example.

4.3 Chemical Resistance

Front membrane

The resistance of the front membrane to various chemicals has been tested to DIN 42 115, section 2. The front membrane is resistant to the chemicals listed below:

- Alcohol
- Diluted acids
- Diluted caustic solutions
- Ester
- Hydrocarbons
- Household cleaners

You can find information of chemical resistance on the Internet (https://support.industry.siemens.com/cs/ww/en/view/39718396).

Mounting gasket

The mounting gasket made of EPDM is approved for food according to FDA 21 CFR 177-2600.

4.4 Handling of stainless steel surfaces

Resistance

Information on the resistance of stainless steel:

- The stainless steel surface is not fully resistant against the chemicals listed below:
  - Hydrochloric acid
  - Sulphuric acid
  - Sodium hydroxide
  - Chlorine
  - Chlorides

  Do not clean the stainless steel surface with these chemicals or with similar acids or caustic solutions.
- Acid steam develops, for example, when tiles are cleaned with hydrochloric acid, and is also harmful to the stainless steel. If the stainless steel parts are unintentionally contaminated with hydrochloric acid, rinse these off immediately with plenty of water.
- Clean the stainless steel surface with a cleansing agent without active chlorine.

Cleaning guidelines

Further information on stainless steel surfaces:

- The surface should be properly ventilated.
- Keep the surface clean. Immediately remove any product residues and cleaning agents. Always avoid the return unwanted residues to the production process.
- If mechanical cleaning is necessary, do not use cleaning equipment made of metal.
  - Clean with a soft cloth.
  - Use plenty of water to clean the surface.
  - Make sure that the cleansing agent is completely removed without any residue.
- Make sure surface is not damaged: Do not damage the device during operation, or by cleaning or repairing it using hard tools, in particular tools made of corrodible materials.
- Make sure that the surface does not come into contact with rusted parts.

  This includes water pipes, filings, residue from wire brushes or steel wool. These, as well as rust films have a corrosive effect on parts made of stainless steel.
  - Remove any stains or rust immediately.
  - Remove new rust spots with a mild abrasive detergent in order to prevent any further corrosion.
  - Rinse the part thoroughly after you cleaned it.

Technical specifications

5

5.1 Software license agreements

Microsoft licenses

License fees for the pre-installed Microsoft operating system on the HMI devices are paid directly by Siemens to the Microsoft company.

No COA label ("Certificate of Authenticity") and no other proof of license is required for the HMI device.

Open Source Software

If available, observe the software license agreements for Open Source software on the enclosed data carrier "Open Source Software License Conditions".

5.2 Certificates and approvals

Approvals

Note

The following overview shows possible approvals.

The HMI device itself is approved as shown on the rear panel labels.

CE approval

CE

The HMI device meets the general and safety-related requirements of the following EU directives and conforms to the harmonized European standards (EN) for programmable logic controllers published in the official gazettes of the European Union:

- 2014/30/EU "Electromagnetic Compatibility" (EMC Directive)
- 2014/34/EU "Equipment and protective systems for use in hazardous areas" (Explosion protection directive)
- 2011/65/EU "Directive of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment" (RoHS Directive)

EU Declaration of Conformity

The EU Declarations of Conformity are available to the relevant authorities at the following address:

Siemens AG
Digital Industries
Factory Automation
DI FA HMI
Breslauer Str. 5
DE-90766 Fürth, Germany

The Declaration of Conformity and other certificates are also available at the following Internet address: INOX HMI device certificates
(https://support.industry.siemens.com/cs/ww/en/ps/14830/cert)

UKCA marking

The devices fulfill the requirements and protection goals of the following regulations and associated supplements and comply with the designated British standards (BS) published in the official consolidated list of the British Government.

- Electromagnetic Compatibility Regulations 2016 (EMC)
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (RoHS)

If the device has Ex approval, the following also applies:

- Equipment and Protective Systems Intended for use in Potentially Explosive Atmospheres Regulations 2016 (Explosion Protection)

UK Declarations of Conformity

The UK Declarations of Conformity are available to the relevant authorities at the following address:

Siemens AG
Digital Industries
Factory Automation
DI FA HMI
Breslauer Str. 5
DE-90766 Fürth, Germany

The Declaration of Conformity and other certificates are also available at the following Internet address: INOX HMI device certificates
(https://support.industry.siemens.com/cs/ww/en/ps/14830/cert)

IEC 61131

The HMI device satisfies the requirements and criteria conforming to IEC 61131-2, Programmable Logic Controllers, Part 2: Equipment requirements and tests.

UL approval

Underwriters Laboratories Inc., to

- UL 508 (Industrial Control Equipment)
- CSA C22.2 No. 142 (Process Control Equipment)

or

Underwriters Laboratories Inc., to

- UL 508 (Industrial Control Equipment)
- CSA C22.2 No. 142 (Process Control Equipment)
- ANSI/UL 121201
- UL 1604 (Hazardous Location)
- CSA-213 (Hazardous Location)

Approved for use in

- Class I, Division 2, Group A, B, C, D or
- Class I, Zone 2, Group IIC or
- non-hazardous locations

Installation instructions for cULUS haz.loc.

- WARNING: - Risk of explosion - Do not disconnect cables while the electrical circuits are still live unless you are in a non-hazardous environment.
- WARNING: - Risk of explosion - When you replace components, compliance with Class I, Div. 2 or Zone 2 can become invalid.
- This device is suitable for use in Class I, Div. 2, Groups A, B, C, D; Class I, Zone 2, Group IIC, or in non-hazardous areas.

FM Approval

Factory Mutual Research (FM) conforming to

- Approval Standard Class Number 3611, 3600, 3810
- CSA C22.2 No. 213
- CSA C22.2 No. 1010.1

Approved for use in

- Class I, Division 2, Group A, B, C, D
  T4
- Class I, Zone 2, Group IIC
  T4

ATEX/UKEX/IECEx approval

Notes on use in hazardous areas

Observe the following FAQ regarding the use of an HMI device in hazardous areas: ATEX-FAQ (https://support.industry.siemens.com/cs/ww/en/view/291285)

When using the device in hazardous areas, ensure that all plugs connected to the device are secured in a captive manner, see section "Securing cables for use in hazardous areas (Page 22)".

You can find more information about explosion protection, EC/EU declarations of conformity and other certificates on the Internet at the following address:

Certificates for Comfort Panels (http://support.automation.siemens.com/WW/view/en/47182890/134200)

ATEX/UKEX approval

For an HMI device with "Ex" marking, the following approvals apply according to the following standards.

- Standards:
  - EN IEC 60079-0:2018
  - EN IEC 60079-7:2015 +A1:2018
  - EN 60079-31:2014
- Approvals:

Ex	II 3 G	Ex ec IIC T4 Gc
	II 3 D	Ex tc IIIC Dc

IECEx approval

For an HMI device with "IECEx" marking, the following approvals apply according to the following standards.

- Standards:
  - IEC 60079-0:2017
  - IEC 60079-7:2017
  - IEC 60079-31:2013
- Approvals:

IECEx	Ex ec IIC T4 Gc
	Ex tc IIIC Dc

WARNING

Operating temperature for ITC1900 INOX, TP1900 Comfort INOX

The ambient temperature range is 0 °C ≤ T ≤ 45 °C. Under these conditions, the HMI device satisfies a maximum surface temperature of **xx** °C for category 3D (**xx** = Temperature values, see design examination certificate (https://support.industry.siemens.com/cs/ww/en/ps/14830/cert)).

CCCEx approval

The following approvals according to the following standards are valid for a device with the "CCC" marking.

- Standards:
  - GB/T 3836.1 (Explosive atmospheres - Part 1: Equipment - General requirements)
  - GB/T 3836.3 (Explosive atmospheres - Part 3: Equipment protection by increased safety "e")
  - GB/T 3836.31 (Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t")
- Approvals:
  - Ex ec IIC T4 Gc
  - Ex tc IIIC Dc

Special conditions of use

- The front of the HMI device provides a degree of protection of at least IP65.

  The front of the HMI device must be installed in a certified enclosure which offers a degree of protection of at least IP54 in accordance with GB/T 3836.1 for Group II, IP54 in accordance with GB/T 3836.1 for Group IIIA and IIIB, and IP6X in accordance with GB/T 3836.1 for Group IIIC.

  During use, make allowances for the ambient conditions.
- The equipment shall be installed in such a way that the risk of mechanical danger is low.
- To avoid an electrostatic charge, wipe the enclosure surface with a damp cloth only.
- Expanded inclination and temperature range for TP700/900/1200/1500 Comfort devices, when the following conditions are met:
  - The load on the USB ports does not exceed a total of 100 mA.
  - The +24 V DC connection of the PROFIBUS interface is not used.
  - The relative humidity during operation is 10% to 60%, without condensation.

  The following mounting positions and temperature ranges are permitted under the specified conditions:
  - Landscape format without inclination at an ambient temperature of up to +55 °C.
  - Landscape format with 40° inclination at an ambient temperature of up to +40 °C.
- When used in an area requiring the use of equipment with EPL Gc, the following additional conditions apply:
  - The equipment shall only be used in an area of not more than pollution degree 2, as defined in GB/T 16935.1.
  - Provisions shall be made to prevent the rated voltage from being exceeded by transient disturbances of more than 119 V.

RCM Declaration of Conformity for Australia/New Zealand

This product meets the requirements of the standards:

- AS/NZS 61000.6.4
- IEC 61000-6-4

KOREA

This product meets the requirements of Korean certification.

This product satisfies the requirement of the Korean Certification (KC Mark).

이 기기는 업무용(A급) 전자파 적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며 가정 외의 지역에서 사용하는 것을 목적으로 합니다.

Note that this device conforms to Limit Class A for emission of radio interference. This device can be used in all areas except the residential area.

Eurasian Customs Union marking

EAC (Eurasian Conformity)

- Customs union of Russia, Belarus and Kazakhstan
- Declaration of conformity according to Technical Regulations of the Customs Union (TR CU)

WEEE label (European Union)

Disposal notice, observe the local regulations and the section "Recycling and disposal" of the Operating Instructions.

Marine approvals

The marine approvals for the device are listed in the following product information: Comfort Panels INOX, ITC INOX Marine approvals (https://support.industry.siemens.com/cs/ww/en/view/109743146)

5.3 Electromagnetic compatibility

The HMI device satisfies, among other things, the requirements of the EMC guidelines of the European domestic market.

EMC-compatible installation of the HMI device

The EMC-compliant installation of the HMI device and the application of interference-proof cable is the basis for interference-free operation.

Observed the following manuals in addition to these operating instructions:

- Designing interference-free controllers (https://support.industry.siemens.com/cs/ww/en/view/59193566)
- Industrial Ethernet / PROFINET - Passive network components (https://support.industry.siemens.com/cs/ww/en/view/84922825)
- PROFIBUS networks (https://support.industry.siemens.com/cs/ww/en/view/1971286)

Pulse-shaped disturbance

The following table shows the electromagnetic compatibility of modules with regard to pulse-shaped interference. The precondition for electromagnetic compatibility is that the HMI device meets the specifications and guidelines for electrical installation.

Pulse-shaped interference	Tested with	Performance level equivalence
Electrostatic discharge in accordance with IEC 61000-4-2	Air discharge: 8 KV	3
	Contact discharge: 6 kV (front)	
	Contact discharge: 4 kV (rear)	2
Bursts (high-speed transient interferences) in accordance with IEC 61000-4-4	2 kV supply cable 1 kV signal line, < 30 m	3
	2 kV signal line, > 30 m	4
High-energy single pulse (surge) in accordance with IEC 61000-4-5 [1]	Asymmetrical coupling (line to ground):	
	• 1 kV supply cable, DC voltage	2
	• 1 kV signal line/data cable, > 30 m	
	Symmetrical coupling (line to line):	
	• 0.5 kV power cable, DC voltage	2
	• 1 kV signal line, > 30 m	3

[1] The following applies to Comfort V1/V1.1 devices: External protective circuit required, see Function Manual "Designing interference-free controllers", section 7 "Lightning protection and overvoltage protection"

You can find the Function Manual "Designing interference-free controllers" for download on the Internet (https://support.industry.siemens.com/cs/ww/en/view/59193566).

Sinusoidal interference

The following table shows the EMC behavior of the modules with respect to sinusoidal interference. This requires the HMI device to meet the specifications and directives for electrical installation.

Sinusoidal interference	Test values
HF radiation (electromagnetic fields) according to IEC 61000-4-3	Comfort V1/V1.1 devices: 80% amplitude modulation at 1 kHz • to 10 V/m from 80 MHz ... 1 GHz • to 10 V/m from 1.4 GHz ... 2 GHz • to 1 V/m from 2 GHz ... 2.7 GHz
	Comfort V2 devices: 80% amplitude modulation at 1 kHz • To 10 V/m in the range 80 MHz to 1 GHz • To 3 V/m in the range 1.4 GHz to 6 GHz
HF current feed on cables and cable shields according to IEC 61000-4-6	Test voltage 10 V with 80% amplitude modulation at 1 KHz in the 10 KHz to 80 MHz range
Magnetic field intensity	50/60 Hz; 100 A/m RMS

Emission of radio interference

The following table shows the interference emission from electromagnetic fields according to EN 61000-6-4, measured at the following distance.

Radiated emission (emitted interference)

Frequency range	Measuring distance	Interference emission
30 ... 230 MHz	10 m	< 40 dB (µV/m) quasi-peak
230 ... 1000 MHz	10 m	< 47 dB (µV/m) quasi-peak
1 ... 3 GHz	3 m	< 76 dB peak and < 56 dB average
3 ... 6 GHz	3 m	< 80 dB peak and < 60 dB average

Emission of radio interference voltages

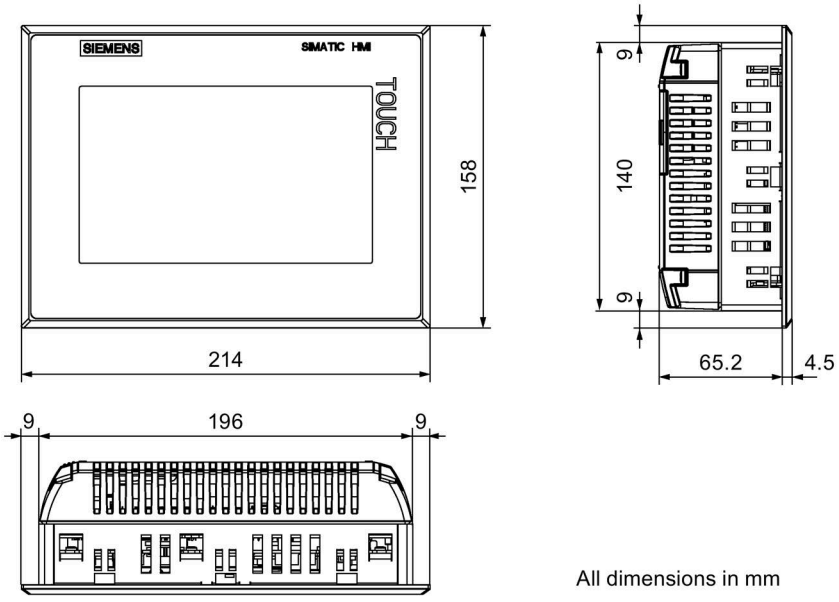
Frequency range	Interference emission
0.150 ... 0.5 MHz	< 79 dB quasi-peak and < 66 dB average
0.5 ... 30 MHz	< 73 dB quasi-peak and < 60 dB average

See also

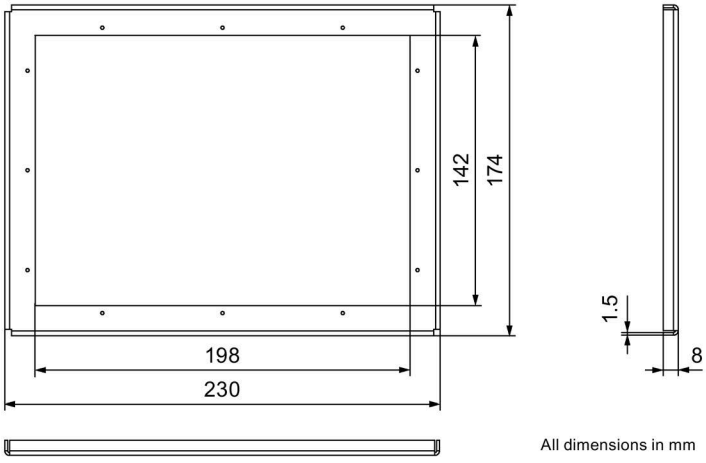
EMC information in section "Notes on use (Page 12)".

5.4 Dimension drawings

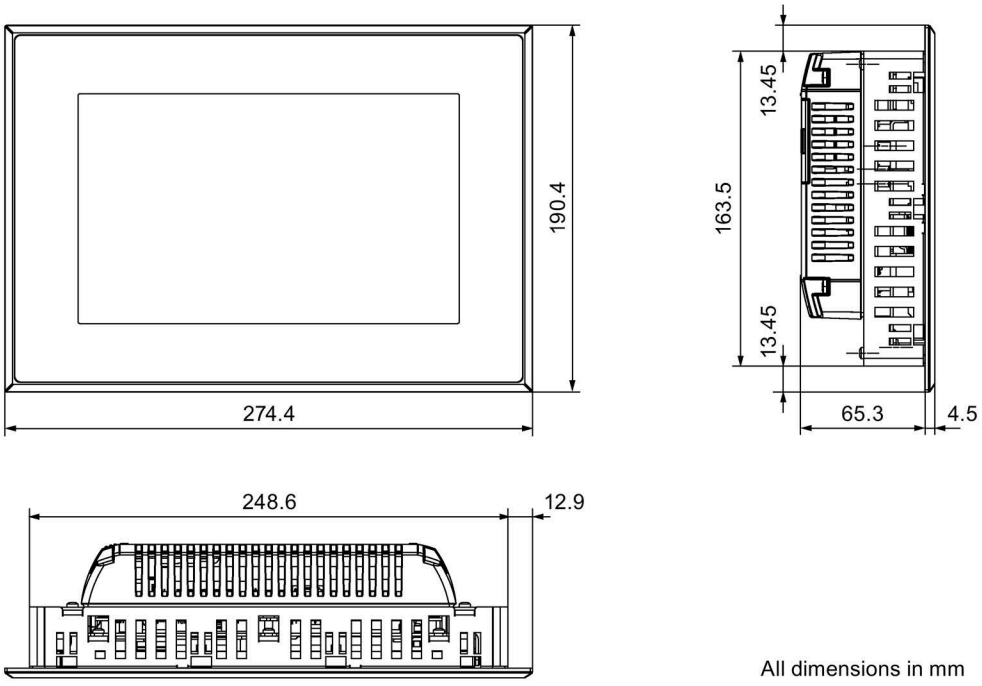
5.4.1 Dimension drawing TP700 Comfort INOX



Clamping frame

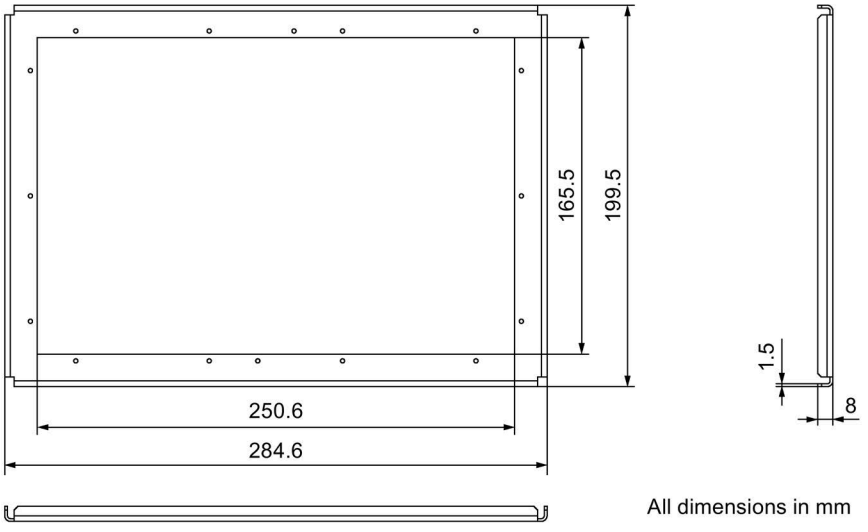


5.4.2 Dimension drawing TP900 Comfort INOX



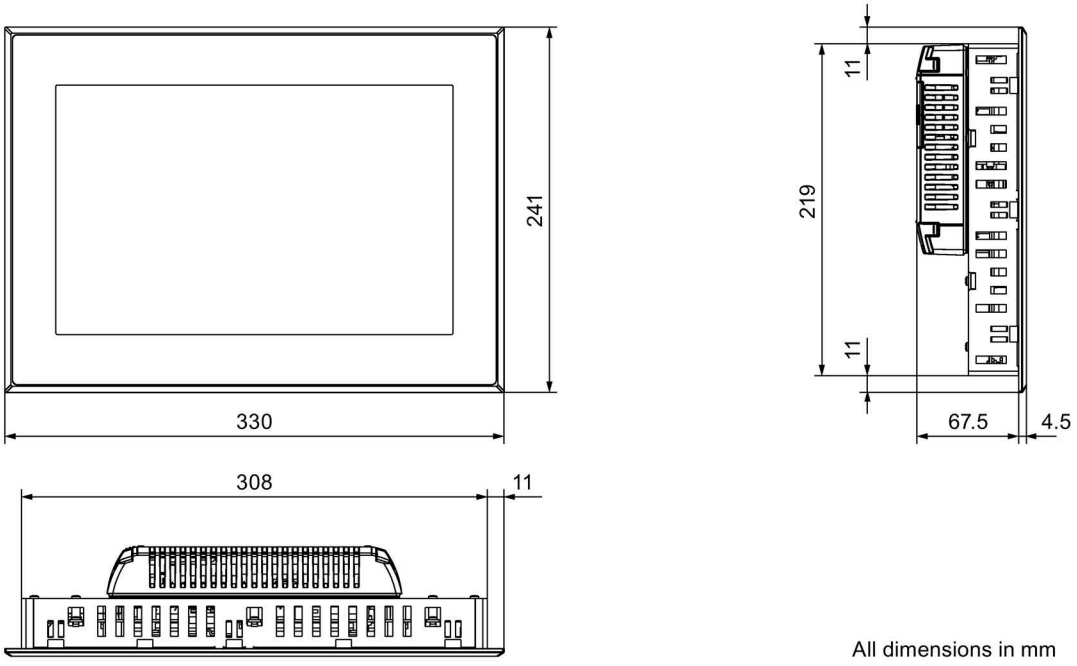
All dimensions in mm

Clamping frame



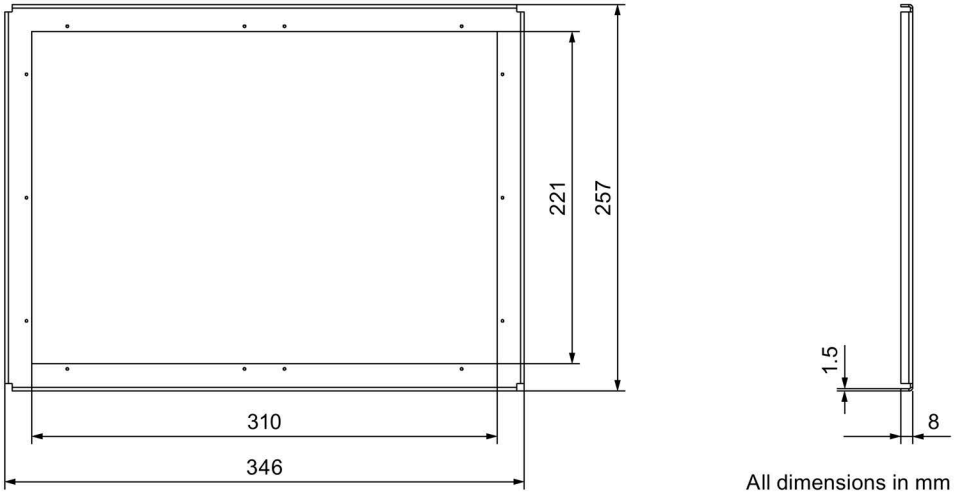
All dimensions in mm

5.4.3 Dimension drawing TP1200 Comfort INOX



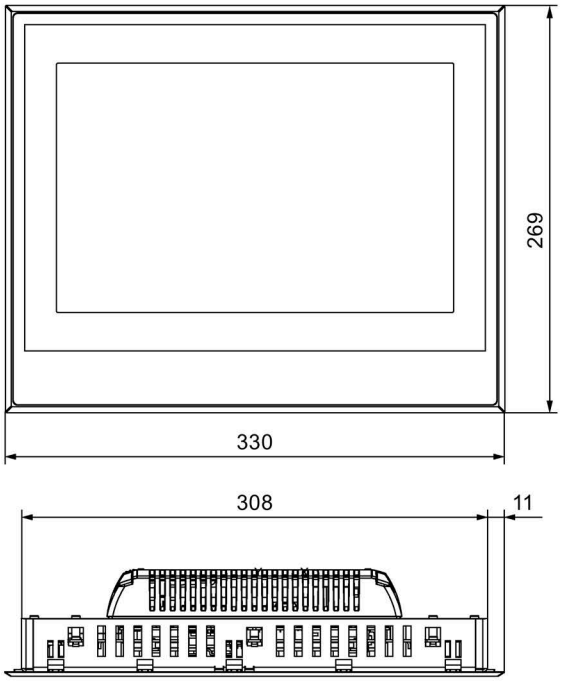
All dimensions in mm

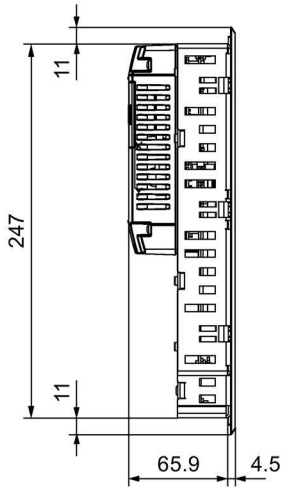
Clamping frame



All dimensions in mm

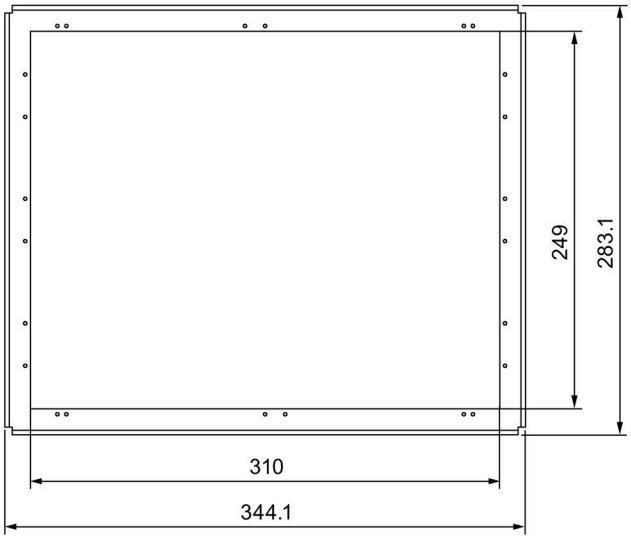
5.4.4 Dimension drawing TP1200 Comfort INOX LF

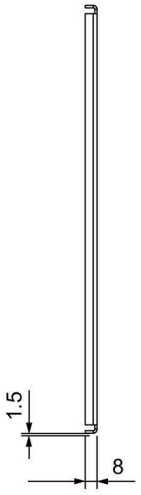




All dimensions in mm

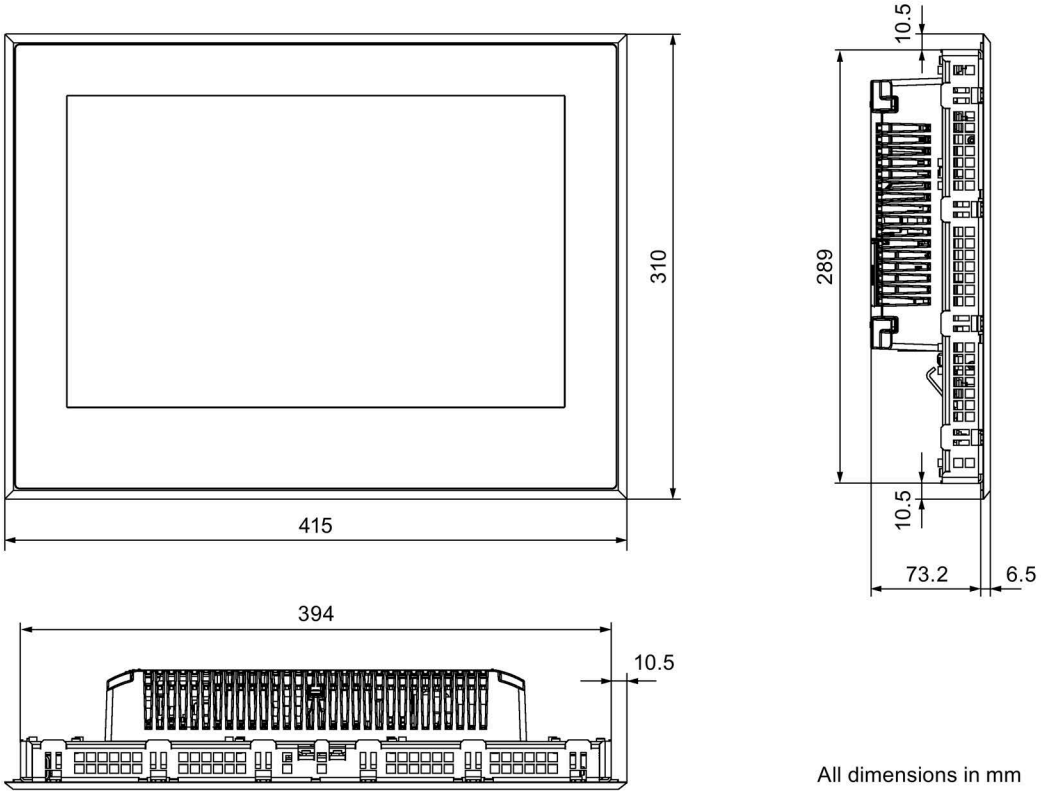
Clamping frame



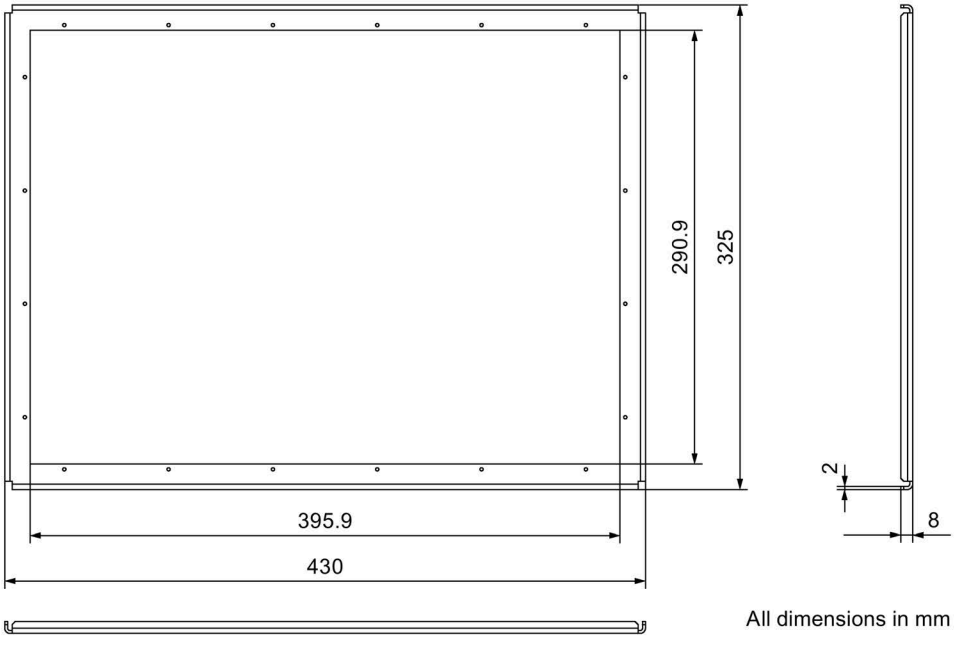


All dimensions in mm

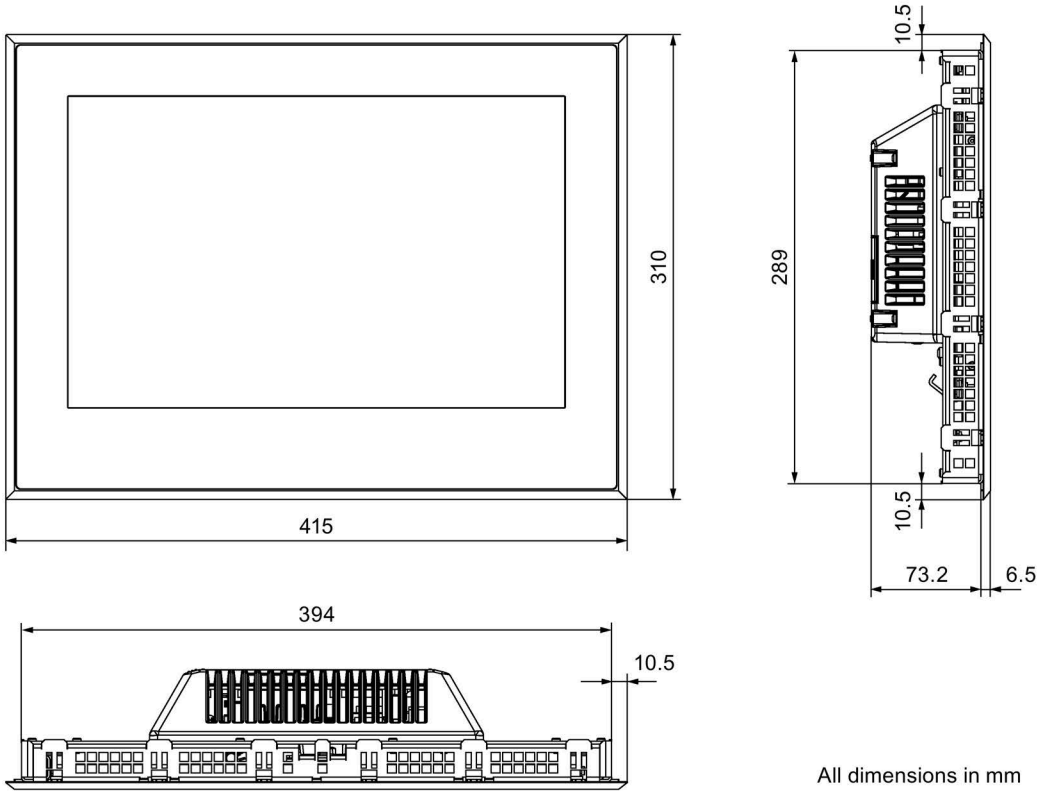
5.4.5 Dimension drawing TP1500 Comfort INOX



Clamping frame



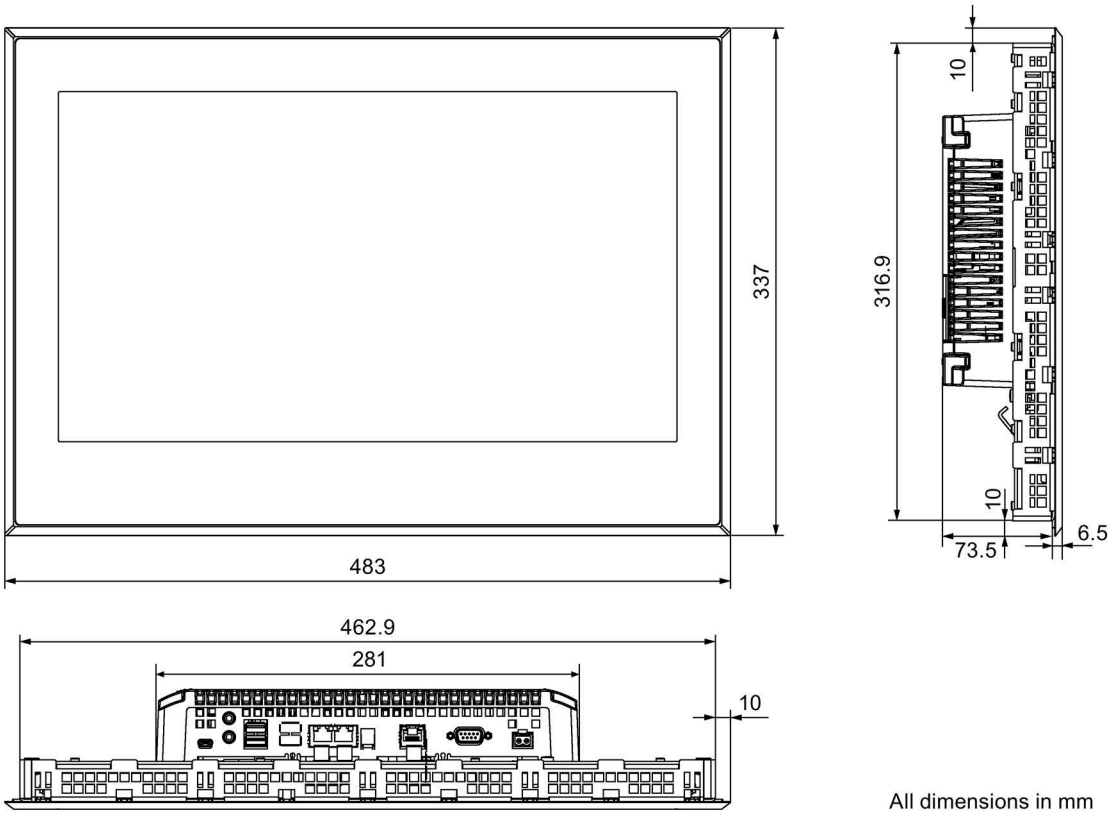
5.4.6 Dimension drawing TP1500 Comfort INOX based on V2



Clamping frame

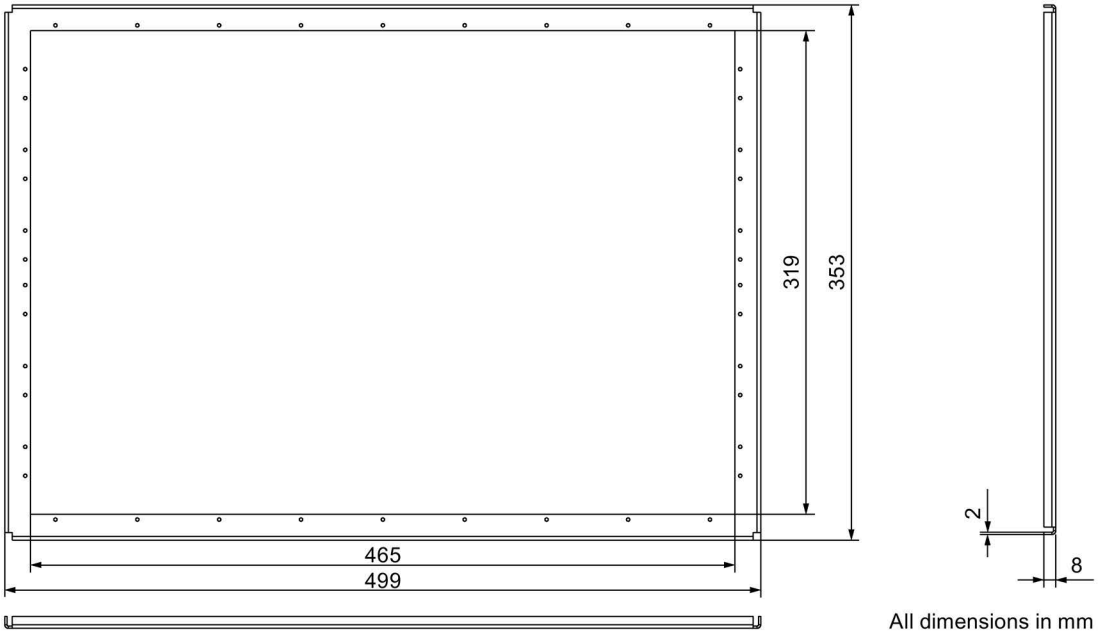
See section "Dimension drawing TP1500 Comfort INOX (Page 38)".

5.4.7 Dimension drawing TP1900 Comfort INOX, ITC1900 INOX



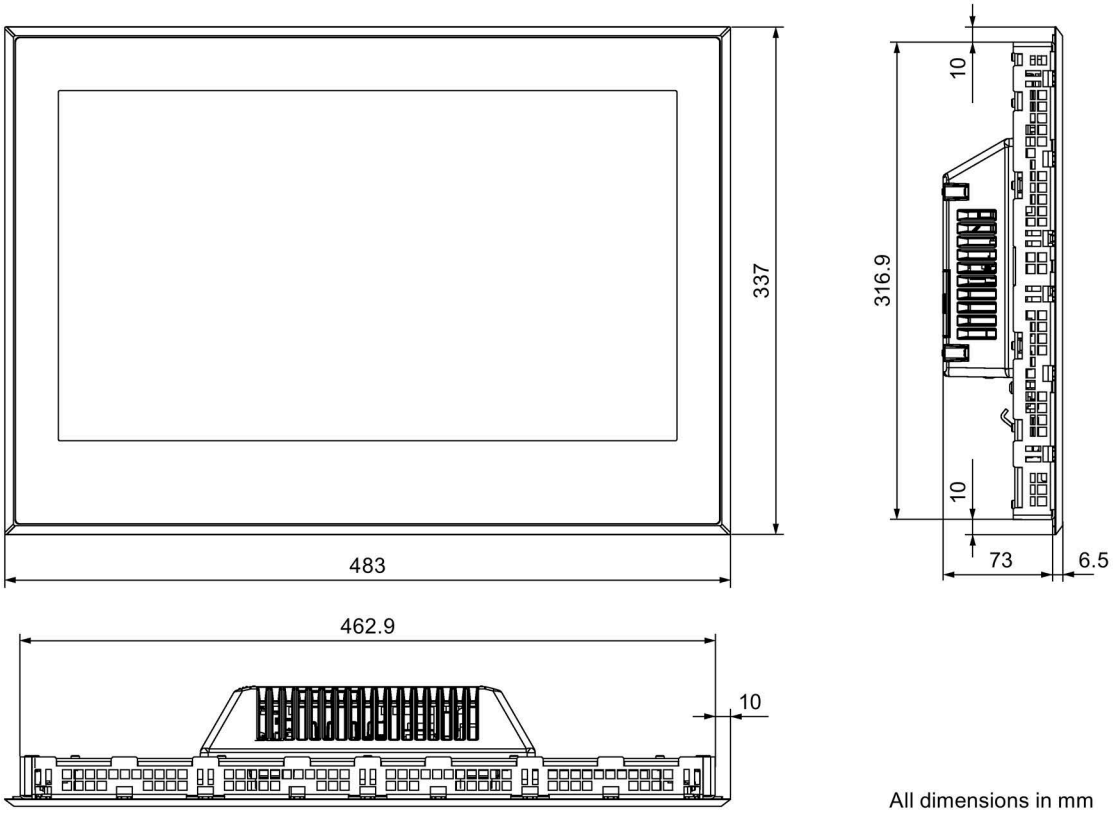
All dimensions in mm

Clamping frame



All dimensions in mm

5.4.8 Dimension drawing TP1900 Comfort INOX based on V2



Clamping frame

See section "Dimension drawing TP1900 Comfort INOX, ITC1900 INOX (Page 40)".

5.5 Technical specifications

Weight

Device	Weight including clamping frame, gasket and mounting clips, without packaging	
	Comfort Panels V1	Comfort Panels V2
TP700 Comfort INOX	approx. 1.9 kg	-
TP900 Comfort INOX	approx. 2.5 kg	-
TP1200 Comfort INOX	approx. 3.6 kg	-
TP1200 Comfort INOX LF	approx. 4.2 kg	-
TP1500 Comfort INOX	approx. 6.6 kg	approx. 5.9 kg
TP1900 Comfort INOX	approx. 8.8 kg	approx. 7.9 kg
ITC1900 INOX	approx. 8.8 kg	

Material

Component	Material
Front frame	Stainless steel, material number 1.4301, V2A
Front membrane	Polyester-based
Mounting gasket	EPDM, 70 Shore A, black

Protection class and degree of protection

Characteristic	Standard	Classification
Protection class	EN 61131-2	Protection class III
Degree of protection, on the front, for operation at normal atmospheric conditions	EN 60529:1991 + A1:2000 and DIN 40050-9	IP66K
Degree of protection, on the front, for operation in hazardous areas of Zones 2 and 22	See section "Certificates and approvals (Page 26)", "ATEX/IECEx approval" paragraph.	IP65
Degree of protection, rear	EN 60529	IP20
Enclosure Type, Front face only	UL50	TP700 Comfort INOX, TP1200 Comfort INOX, TP1200 Comfort INOX LF, TP1900 Comfort INOX, ITC1900 INOX: Type 4X (indoor use only)
		TP900 Comfort INOX, TP1500 Comfort INOX, Type 4X/Type 12 (indoor use only)

Note that the information on "enclosure type" is only guaranteed if the mounting cutout conforms to the following:

- The device has been installed according to the information provided in this document.
- Material thickness at the mounting cutout:
  - With 7, 9, and 12" devices: 1.5 mm to 6 mm
  - With 15" and 19" devices: 1.5 mm to 5 mm
- Permitted deviation from plane at the mounting cutout: ≤ 0.5 mm

  This condition must be fulfilled even for the mounted device.
- Permitted surface roughness in the area of the mounting gasket: ≤ 120 µm, corresponds to Rz 120

5.6 Classification of environmental conditions

5.6.1 Overview

The standards of the IEC 60721 series can be used to classify short-term extreme environmental conditions that can occur during the service life of a product. Structurally, the product is designed in such a way that it can withstand the extreme environmental conditions according to the classification.

The following chapters provide you with information on the classification of the environmental conditions for the device:

- Long-term storage and transport
- Stationary and weather-protected use

5.6.2 Classification for storage

This device exceeds requirements according to IEC 61131-2:2007 "Programmable controllers – Part 2: Equipment requirements and tests" in terms of valid environmental conditions. The following classes apply to the device when stored in the original packaging.

- Mechanical environmental conditions

Standard	Title
IEC 61131-2:2007	Programmable logic controllers – Part 2: Equipment requirements and tests

- Climatic environmental conditions

Standard	Title
IEC 60721-3-1:1997	Classification of groups of environmental parameters and their severities – Section 1: Storage Class 1K1 applies with the following expansions: • Temperature ranges: – TP700/900 Comfort INOX: -20 °C to 60 °C – TP1200 Comfort INOX: -20 °C to 55 °C – TP1200 Comfort INOX LF: -20 °C to 55 °C – TP1500 Comfort INOX: -20 °C to 50 °C – TP1900 Comfort INOX: -20 °C to 45 °C • Range of relative humidity: – TP700/900 Comfort INOX: 10% to 90% – TP1200/1500 Comfort INOX [1]: 10% to 80% – TP1900 Comfort INOX, ITC1900 INOX: 10% to 70%

[1] including TP1200 Comfort INOX LF

The tests relevant for the specified classes correspond to the tests for classification of shipping. The testing of the device was performed in the original packing.

5.6.3 Classification for shipping

This device exceeds requirements according to IEC 61131-2:2007 "Programmable controllers – Part 2: Equipment requirements and tests" in terms of valid environmental conditions.

The following specifications apply to the device when transported in the original packing.

- Mechanical environmental conditions

Standard	Title
IEC 61131-2:2007	Programmable logic controllers – Part 2: Equipment requirements and tests

- Climatic environmental conditions

Standard	Title
IEC 60721-3-2:1997	Classification of groups of environmental parameters and their severities – Section 2: Transportation Class 2K1 applies with the following extensions: • Temperature ranges: – TP700/900 Comfort INOX: -20 °C to 60 °C – TP1200 Comfort INOX: -20 °C to 55 °C – TP1200 Comfort INOX LF: -20 °C to 55 °C – TP1500 Comfort INOX: -20 °C to 50 °C – TP1900 Comfort INOX, ITC1900 INOX: -20 °C to 45 °C • Range of relative humidity: – TP700/900 Comfort INOX: 10% to 90% – TP1200/1500 Comfort INOX [1]: 10% to 80% – TP1900 Comfort INOX, ITC1900 INOX: 10% to 70%

[1] including TP1200 Comfort INOX LF

The following specifications apply to the device when transported in the original packing.

The following values are derived for the significant tests from the classes stated. The testing of the device was performed in the original packing.

Test	Value	Comment
Free-fall	≤ 0.3 m	The device was tested according to IEC 60721-3-2 Class 2M4.
Temperature EN 60068-2-1, test Ab and EN 60068-2-2, test Bb	-20 °C to +60 °C	Cold and dry heat
Air pressure; IEC 60068-2-13	1140 hPa to 660 hPa	Corresponds to an altitude of -1000 m to 3500 m
Humidity, relative	• TP700/900 Comfort INOX: 10% to 90% • TP1200/1500 Comfort INOX [1]: 10% to 80% • TP1900 Comfort INOX, ITC1900 INOX: 10% to 70%	No condensation
Shock; IEC 60068-2-27	250 m/s², 6 ms	1000 shocks

[1] including TP1200 Comfort INOX LF

Tests for mechanical environmental conditions in the transport packaging

The following table shows the type and scope of the tests of the device with regard to mechanical environmental conditions.

Test	Physical quantity	Value
Vibration test IEC 60068-2-6:2007-12 Test Fc	Vibration	3 axes, 10 cycles per axis Frequency change: 1 octave / min
	Frequency range	5 Hz to 8.4 Hz, deflection 3.5 mm
		8.4 Hz to 150 Hz, vibration acceleration 9.8 m/s^2
Shock duration test IEC 60068-2-27:2008-02 Test Ea	Shock form	half-sine
	Acceleration	25 g
	Shock duration	6 ms
	Number of shocks	1000 shocks in each of the three mutually vertical axes.

Tests for climatic environmental conditions in the transport packaging

The following table shows the type and scope of the tests of the device with regard to climatic environmental conditions.

Environmental condition	Physical quantity	Value
Cold test EN 60068-2-1:2007-03 Test Ab	Temperature	-20 °C
	Duration	16 h
	Rate of temperature change	20 K/h
Warm test, dry EN 60068-2-2:2007-07 Test Bb	Temperature	60 °C
	Duration	16 h
	Rate of temperature change	20 K/h

5.6.4 Classification for stationary and weather-protected use

The following classes apply when the device is operated.

- Mechanical environmental conditions

Standard	Title
IEC 60721-3-3:1997	Classification of groups of environmental parameters and their severities – Section 3: Stationary use at weatherprotected locations Class 3M3 applies.

- Climatic environmental conditions

Standard	Title
IEC 60721-3-3:1994	Classification of groups of environmental parameters and their severities – Section 3: Stationary use at weatherprotected locations Class 3K3 applies.

The following values are derived for the significant tests from the classes stated. The testing of the device was performed **without** original packing.

Ambient temperature during operation

Type of condition	Mounting position	Permissible range
Temperature, Landscape mounting	Vertical	0 °C to 50 °C [1]
	inclined, incline max. 35°	0 °C to 40 °C
Temperature, Portrait mounting	Vertical	0 °C to 40 °C
	inclined, incline max. 35°	0 °C to 35 °C

[1] TP1900 Comfort INOX and ITC1900 INOX: 0 °C to 45 °C
[2] No pressure difference inside and outside of the enclosure/control cabinet permitted

Humidity and atmospheric pressure during operation

Test	Value, range	Comment
Humidity		
• TP700/TP900 Comfort INOX	10% to 90%	No condensation
• TP1200/1500 Comfort INOX • TP1200 Comfort INOX LF	10% to 80%	No condensation
• TP1900 Comfort INOX, ITC1900 INOX	10% to 70%	No condensation
Atmospheric pressure [1]	1140 hPa to 795 h Pa	Corresponds to an altitude of -1000 m to 2000 m

[1] No pressure difference inside and outside of the enclosure/control cabinet permitted

Observe the Notes on use (Page 12).

In addition, observe the climate diagram in the following section and the information on the extended inclination and ambient temperature range, see section "Selecting a mounting position (Page 14)".

Note

System components connected to the HMI device, such as the power supply, must also be suitable for operation under the corresponding rated conditions.

Tests for mechanical environmental conditions during operation

The following table shows the type and scope of the tests of the device with regard to mechanical environmental conditions.

Test	Physical quantity	Value
Vibration test IEC 60068-2-6:2007-12 Test Fc	Vibration	3 axes, 10 cycles per axis Frequency change 1 octave/min
	Frequency range	5 to 8.4 Hz, deflection 3.5 mm
		8.4 to 200 Hz, vibration acceleration 9.8 m/s^2
Shock test IEC 60068-2-27:2008-02 Test Ea	Shock form	half-sine
	Acceleration	15 g
	Shock duration	11 ms
	Number of shocks	3 per axis in positive and negative direction
Fall EN 60068-2-31:2009 Test Ec	Fall height	0.3 m
	Number of strains	5

Tests for climatic environmental conditions during operation

The following table shows the type and scope of the tests of the device with regard to climatic environmental conditions.

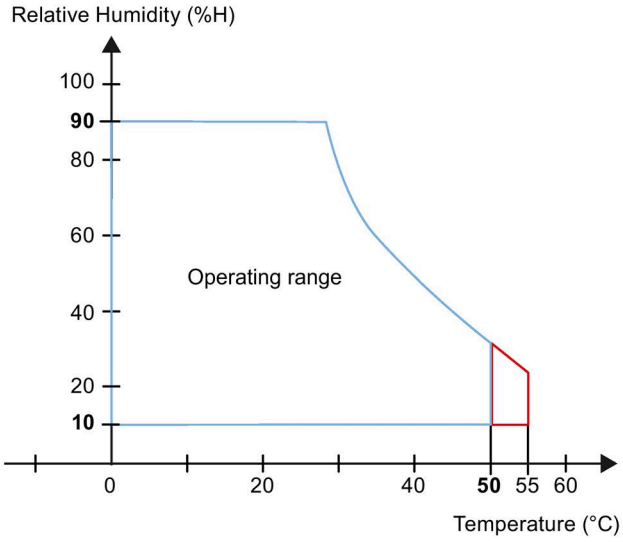
Environmental condition	Physical quantity	Value
Cold test EN 60068-2-1:2007-03 Test Ad	Temperature	0 °C
	Duration	16 h
	Speed of the temperature change	10 K/h
Warm test, dry EN 60068-2-2:2007-07 Test Bd	Temperature	
	• TP700/900/1200/1500 Comfort INOX [1]	50 °C
	• TP1900 Comfort INOX, ITC1900 INOX	45 °C
	Duration	96 h
	Speed of the temperature change	10 K/h

[1] including TP1200 Comfort INOX LF

5.6.5 Climate diagram

The diagram below shows the extended range for temperature and humidity in uninterrupted duty based on IEC 60721-3-3 class 3K3 using the TP700/TP900 Comfort INOX as an example. Information on the maximum permitted humidity of the other devices is available in the section "Classification for stationary and weather-protected use (Page 45)".

The information applies to a device installed in landscape without inclination.



Red: Extended temperature range of 7-15" devices; see section "Selecting a mounting position (Page 14)".

Technical Support

A

A.1 Service and support

You can find additional information and support for the products described on the Internet at the following addresses:

- Technical support (https://support.industry.siemens.com)
- Support request form (https://www.siemens.com/supportrequest)
- After Sales Information System SIMATIC IPC/PG (https://www.siemens.com/asis)
- SIMATIC Documentation Collection (https://www.siemens.com/simatic-tech-doku-portal)
- Your local representative (https://www.automation.siemens.com/aspa_app)
- Training center (https://siemens.com/sitrain)
- Industry Mall (https://mall.industry.siemens.com)

When contacting your local representative or Technical Support, please have the following information at hand:

- MLFB of the device
- BIOS version for industrial PC or image version of the device
- Other installed hardware
- Other installed software

Current documentation

Always use the current documentation available for your product. You can find the latest edition of this manual and other important documents by entering the article number of your device on the Internet (https://support.industry.siemens.com). If necessary, filter the comments for the entry type "Manual".

Tools & downloads

Please check regularly if updates and hotfixes are available for download to your device. The download area is available on the Internet at the following link:

After Sales Information System SIMATIC IPC/PG (https://www.siemens.com/asis)

List of abbreviations

B

DC	Direct Current
ESD	Components and modules endangered by electrostatic discharge
EMC	Electromagnetic Compatibility
EN	European standard
FDA	Food and Drug Administration
GND	Ground
HF	High Frequency
IEC	International Electronic Commission
IP	Ingress protection
LED	Light Emitting Diode
TFT	Thin Film Transistor
UL	Underwriter's Laboratory
USB	Universal Serial Bus