

SIMATIC HMI operator stations – SIMATIC Multi Panels, Panel PCs and Flat Panels in optimum housing



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simatic hmi

CUSTOMIZED PRODUCTS



SIEMENS

SIMATIC HMI operator stations – From a single source

Wherever SIMATIC HMI Panels, Panel PCs and Flat Panels are used in industrial applications, an ergonomic operator station is also necessary. Certain marginal conditions must be observed when integrating the HMI devices into a plant or machine.

Preconfigured, ready-to-use SIMATIC HMI operator stations provide you with a technically sound design, and save you time and engineering overhead.

Fields of application

Panels and Panel PCs – as typical devices for front mounting – are only IP65-protected at the panel front, and have proven their suitability for control cabinet installation in many sectors.

However, where installation of HMI devices in a control cabinet or directly on the machine is not possible, we recommend using all-in-one HMI operator stations with pedestal or swivel-arm mounting.

With the HMI operator stations, all-round IP65 protection is provided by the special enclosure. Furthermore, there are customized device fronts and also rear mounting versions for special requirements, such as in the food & beverages sector.

Design

With the HMI operator station concept, you can select from a range of functionally-compatible combinations of HMI devices and selected housing. This range of components has been designed for:

- Industrial applications
- Industry-related applications
- Applications in the food & beverages sector

Options include single-row or double-row control elements (3SB series) and the keyboard drawer.

Ergonomic requirements are satisfied since pedestal or swivel-arm mounting is possible. Additional elements permit turning and tilting or height adjustment of the display/control unit.

Further customized adaptations are possible.



highlights

- Save time and engineering costs by using preconfigured SIMATIC HMI operator stations with SIMATIC Multi Panels, Panel PCs or Flat Panels
- Rugged all round, tried and tested in practice
- Ergonomic, technically tested and certified
- Safe operation even under difficult environmental conditions
- Also suitable for special industries
- For maximum availability and investment security
- Support, service and repair with Siemens quality

Ergonomics

- Fatigue-free and fast operation
- Fast adaptation of operator station to different operating personnel
- Coherent operating philosophy is easy to learn

Functionality

- Resistant to shock and vibration loads during operation
- Matching choice of devices (SIMATIC HMI devices with display of 10" or more)
- Secure provision of data transmission and access to drives and interfaces
- Direct machine control (conventional operating elements for direct connection to machine units)
- Simple alphanumeric input options
- Possible to connect external keyboard and mouse
- Installation option for specific hardware components

Availability

- Environmental conditions taken into account (climate, chemicals, mechanical loads)
- Power losses allowed for
- Protection demands
- Cleaning agents catered for
- Housing properties

Operator stations for SIMATIC Multi Panels

- Compact design through shallow mounting depth
- Low weight allows versatile mounting options



Version 1:
Encapsulation



Version 2:
Encapsulation with single-row control panel



Version 3:
Encapsulation with double-row control panel



Version 4:
Encapsulation with double-row control panel and attached keyboard

Operator station

HMI products for installation	Multi Panel: MP 277 10" Keys/Touch; MP377 12" Keys/Touch, 15"/19" Touch Thin Client: 10"/15" Touch			
Housing width in mm (min. ... max.)	444...591			
Housing height in mm (min. ... max.)	384...569	533...569		
Housing depth in mm	131			
Weight in kg (min. ... max.)	9...11	9...11	10...12	13...15
Material	Aluminum			
Surface treatment	Natural anodized			
Degree of protection	IP65			
Approvals	CE			
24 V fan in housing	■	■	■	■
Housing lock	Hinge			
Control elements	-	3SB, 1-row	3SB, 2-row	3SB, 3-row
Keyboard	-	-	-	Attached keyboard with touchpad

Permissible temperature range

Ambient temperature of housing without add-on module	0...40 °C
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Mounting options

Swivel-arm mounting (option)	■	■	■	■
Pedestal mounting (option)	■	■	■	■

Operator stations for SIMATIC Panel PCs and Flat Panels



				Operator station
Flat Panels:	FP 12"/15"/17"/19" Touch; FP 12"/15"/17"/19" display only			HMI products for installation
Panel PC:	PC 477B 12"/15" Keys/Touch, 19" Touch PC 677B 12"/15" Keys/Touch, 17"/19" Touch			
509...591				Housing width in mm (min. ... max.)
419...509	569...659		697...787	Housing height in mm (min. ... max.)
209				Housing depth in mm
23...25	24...28	26...30	27...31	Weight in kg (min. ... max.)
Aluminum				Material
Natural anodized				Surface treatment
IP65				Degree of protection
CE				Approvals
-	-	-	-	24 V fan in housing
Double-bit lock				Housing lock
-	3SB, 1-row	3SB, 2-row	3SB, 3-row	Control elements
-	-	-	In keyboard drawer	Keyboard
				Permissible temperature range
5...40 °C without plugged in add-on modules				Ambient temperature of housing without add-on module
				Mounting options
■	■	■	■	Swivel-arm mounting (option)
■	■	■	■	Pedestal mounting (option)

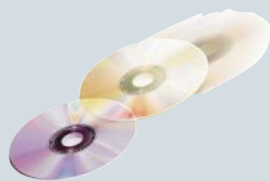
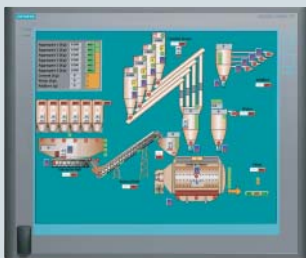
SIMATIC HMI operator stations: Functional and safe – ready-to-use

Comfort panel: Functional and safe

- New design and supplementary functions
- Optimally matched to SIMATIC HMI components
- Rear panel screwed on or with hinge
- With or without trim designed individually according to customer requirements
- Wraparound soft profile reduces the risk of injury to operators
- Front frame secured against unhooking
- Wraparound mounting ducts for individual attachment of accessories internally and externally
- Individual dimensions, equipment and design possible
- With swivel-arm mounting or pedestal



All from one source:



Panel PC



Customized
software image



Housing
including wiring



Ready to
install and use

Turnkey products

Ready to use!

SIMATIC HMI operator stations – practical design for practical use

Our services

We incorporated our experiences gained from an extremely wide range of customized projects in the development of the SIMATIC HMI operator stations. They are characterized by particularly reliable operation – after all, our built-in solutions have already been extensively tested in practice and optimized for the HMI devices:

- Elimination of hotspots in the housing as a result of optimum installation technology
- Determination of actual maximum permissible ambient temperature of complete operator station during operation. The power loss of the HMI device is incorporated into the tests
- Shock and vibration tests of the complete operator station during operation to confirm compliance with the loading limits for rotating mass media and large displays
- The required degrees of protection and EMC measures are established and tested
- The quality of the surface, its resistance to abrasion, and its chemical resistance are checked
- All measures to improve the usability of the operator stations in special environments are designed as far as possible using passive technology (e.g. no active air conditioning). The objective is to guarantee long and fault-free operation.

You thus receive the complete operator station from a single source – with the worldwide service facilities of Siemens.

Benefits

- Optimized operator stations – ready-to-use
- System is certified (VDE, CE and UL) and approved
- 100% tested, test results are documented and archived
- 100% identical devices with customized configuration
- Variable mounting options
- Safe transportation
- Software versions managed by electronic data processing
- Only one Order No.
- Short delivery time ex-stock or built-to-order
- Only one contact partner, all from a single source
- Tested heat balance with specific ambient temperature for long-term availability
- Modular design for customized expansions

Modification options

- Customized design for Panel or Panel PC
- Resistant and rugged stainless steel housing with smooth surface for easy cleaning
- Customized applications for Windows CE-based panels (Open Platform Program)
- Customized control elements
- Active heat dissipation (e.g. small device)
- Ergonomic design with pedestal, wall or swivel-arm mounting
- Customized locks

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