SIMATIC HMI – operator interfaces in IP65

Robustness, all-round protection and versatility

SIMATIC HMI

Answers for industry.

SIEMENS

Perfect for every application

Comfortable controlling and monitoring with market-leading SIMATIC HMI devices is now possible even in difficult application – with an all-round protection for demanding surroundings and flexible mounting options.

Whether in the control cabinet or directly at the machine – with SIMATIC HMI monitoring devices, Siemens has been able to convince as the world market leader in the realm of controlling and monitoring for many years and in many industries and applications. The compact and versatile SIMATIC monitoring devices may be perfectly integrated in many production and automation plants. Nevertheless, there are some applications where built-in devices are not an option due to space limitations or special demands and requirements. The solution: our new HMI devices. Additionally to their proven quality, they now offer an all-round IP65-protected housing and

thus bear new application possibilities with flexible mounting and configuration. This makes them first class foremost in decentralized controlling and monitoring.

With modular extension units, all devices may be individually fit to meet most various demands.

As an integrated part of the SIMATIC family, all HMI devices are of course seamlessly integrated into our holistic spectrum of products – thanks to Totally Integrated Automation (TIA).

The advantages of market-leading technology

With an abundance of proven functionalities and resulting advantages, the all-round protected SIMATIC HMI devices allow efficient controlling and monitoring of machines and plants in every application.

All devices have brilliant touch displays. Thanks to a mechanical interface, they can be mounted to different support arm systems or pedestals. This way they are optimally suited for every application – regardless of the control cabinets of machines on site. An ergonomic operation of HMI devices at different points of use in plant or manufacturing lines is thus made possible. Thanks to their light weight, the all-round-protected HMI devices can be easily mounted and without any further personnel expenditures. The rear panel of the device may be easily removed – for a subsequent mounting of cables or exchanging memory cards, for instance. This results in increased service comfort, even when devices are mounted and in operation right at the respective machine.

By making use of further extension units you will benefit from additional operation options. They can be equipped with plant-specific pushbuttons or other operating elements.

Highlights:

- Fully enclosed in IP65 protection / Enclosure Type 4x
- Highest quality with proven, market-leading technology
- Attractive industrial design
- Easy adaptation to individual demands with modular extension components
- Light weight
- Compatible with supporting arm systems of various manufacturers (incl. VESA standard)
- Mounting either from top or bottom of the device
- Usage of standard cables and connectors
- Easy mounting and service

Perfectly fit and protected

SIMATIC HMI IPC477C PRO 15" and 19" – compact and robust Panel PC with embedded technology

Designed to work without a fan and hard-drive, the SIMATIC HMI IPC477C is very service-friendly and almost maintenance-free. The operating system Windows Embedded Standard 2009 is installed on a CF card and offers the openness of a PC. At the same time, it ensures the robustness of an embedded system.

The SIMATIC HMI IPC477C can optimally be fit to its area of application thanks to its highly adaptable configuration – including powerful Intel processors ranging from 1 Celeron 1.2 GHz to 2 Core Duo 1.2 GHz and variable memory extension of up to 4 GB. Numerous interfaces are available onboard in series, such as a PROFINET interface with 3 ports for easy integration in existing networks. The SIMATIC HMI IPC477C is also available ready for operation, pre-configured with software for HMI, controllers (also fail-safe) or for process visualization.

SIMATIC THIN CLIENT PRO 15" – ideal as a second operating station for cost-optimized automation concepts

Typical applications for the SIMATIC Thin Client are the need for a second operating station in combination with another host (SIMATIC Panel or Panel PC) in extensive plant networks or separated terminals in client-server architectures or WebClients.

Thereby there are no installations, licenses or additional software needed on the SIMATIC Thin Client. Changes or updates on the application software are conducted once on the host and all connected SIMATIC Thin Clients in the network are automatically updated as well. This reduces maintenance efforts and makes the entire system more stable and faster to convert. Thanks to centralized data handling, unwanted redundancies are avoided and the system's data security is increased.

SIMATIC Multi Panel 377 PRO 15" – a high-performance and robust panel with high openness and expandability

SIMATIC Multi Panels distinguish themselves by highest performance, openness and expandability. They also allow the integration of additional software applications based on the standard Windows CE.

Hence, you are combining multiple automation functionalities on a single platform. Comprehensive multimedia options, such as media players, the Internet Explorer or viewers to display Word, Excel or PDF files, enable further operating possibilities. Additionally, all devices are optimized to run the PLC SIMATIC WinAC MP software. This turns the SIMATIC Multi Panel into an economic solution for visualization and controlling tasks.

SIMATIC Flat Panel Monitor PRO 15" and 19" – the brilliant, robust industrial display for all industrial PCs

Realiability, longevity and an industrially compatible design are what makes the difference in SIMATIC Flat Panel Monitors. They are optimally suited for applications in harsh industrial environments. Highest image quality – whether regarding brightness, contrast or sharpness – as well as a wide reading angle allow for improved operating comfort.

In applications that demand a decentralized composition of central processing and operating units, Flat Panel Monitors may be installed and operated at a distance of up to 30 m from the PC unit – such as SIMATIC Box PC, Rack PC or Panel PC.

All-round protection, versatile expandability

These extension units can be mounted either on the device's right- or left-hand side, or both, and can then be equipped with plant-specific pushbuttons or other operating elements, such as:

- Emergency-stop button
- Keyswitch
- Illuminated push buttons
- RFID reader
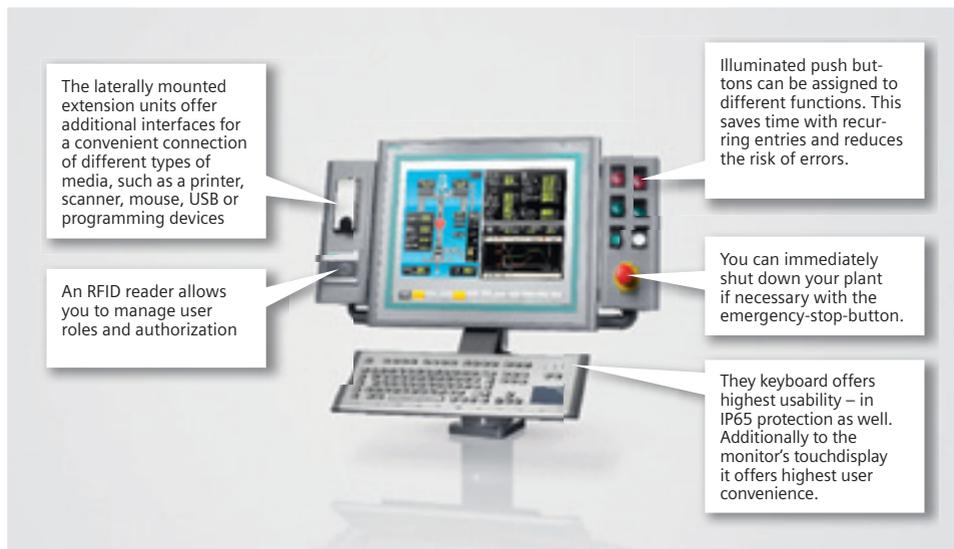- Additional interfaces, such as USB and Ethernet

Different variants are available for the 15" and 19" devices.

Space-saving application with compact design (shown here: SIMATIC HMI IPC477C 19")

The all-round IP65 protection is fully maintained when making use of the extension units. The rear panel can be easily removed even when the device is already mounted, for example for subsequent modifications.

Exemplary configuration for laterally mounted extension units with SIMATIC HMI IPC477C

The laterally mounted extension units offer additional interfaces for a convenient connection of different types of media, such as a printer, scanner, mouse, USB or programming devices

An RFID reader allows you to manage user roles and authorization

Illuminated push buttons can be assigned to different functions. This saves time with recurring entries and reduces the risk of errors.

You can immediately shut down your plant if necessary with the emergency-stop-button.

They keyboard offers highest usability – in IP65 protection as well. Additionally to the monitor's touchdisplay it offers highest user convenience.

Flexible application with supporting arm

All all-round protected Siemens HMI devices may be used with supporting arms of different manufacturers. This offers you highest flexibility when choosing the supporting arm system to suit your needs.

The connection between supporting arm and device can either be made at the top or the bottom of the device. This means, the devices' application is highly flexible regarding their placement at the machine. Depending on the application, either desk or overhead mounting is possible.

Technical data

	SIMATIC Flat Panel Monitor PRO	SIMATIC Thin Client PRO	SIMATIC Multi Panel 377 PRO	SIMATIC HMI IPC477C PRO
Type of protection	IP65 / Enclosure Type 4X / Type 12			
Weight	6.8 kg (15") 10 kg (19")	6.5 kg	7.5 kg	7.5 kg (15") 11 kg (19")
Measures in mm (H x W x D)	400 x 310 x 91 (15") 483 x 400 x 105 (19")	400 x 310 x 91	400 x 310 x 98	400 x 310 x 98 (15") 483 x 400 x 114 (19")
Sloping with desk mounting	+/- 45°			
Surrounding temperature	5°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C (15") 0°C to 40°C (19")
Order number	6AV7861-5TB10-1AA0 / 6AV7861-6TB10-1AA0	6AV6646-2AB21-2AX0	6AV6644-2AB01-2AX0	6AV7883*

* For further configuration please use the internet-based IPC configurator at www.siemens.com/ipc-configurator

www.siemens.com/hmi