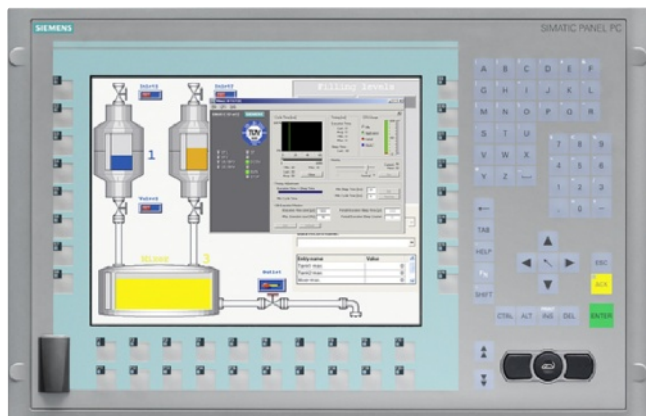


# SIMATIC HMI IPC 477C



SIMATIC HMI IPC477C: The powerful embedded Panel PC – maintenance-free with versatile configuration

- Embedded PC platform with extremely high industrial compatibility for demanding tasks in the field of PC-based automation
- Maintenance-free (no rotating components such as fan and hard disk)
- Rugged construction: The PC is resistant to the harshest mechanical stress and is extremely reliable in operation
- Compact design (only 61-69 mm mounting depth for 12 in. to 19 in. screens)
- Battery-backed retentive memory onboard
- High degree of investment protection
- Fast integration capability

The following front versions are available:

- Build-in versions:
  - 12" and 15" TFT Touch
  - 12" and 15" TFT Keys
  - 19" Touch
- Support arm versions:
  - PRO 15" and PRO 19" Touch
  - Fully enclosed device with degree of protection IP65 for mounting on a support arm/stand

## Design

The HMI IPC477C embedded is a compact unit comprising an operator control unit with an integrated computing unit.

### Standard components of the computer unit:

- Rugged metal enclosure, resistant to vibrations and shocks, with high electromagnetic compatibility.
- Processors:
  - Intel Celeron M 1.2 GHz, Intel Core2 Solo 1.2 GHz or Intel Core2 Duo 1.2 GHz
- Main memory basic configuration:
  - 1, 2 or 4 GB (DDR3)
  - Battery-backed retentive memory 2 MB

- Mass memory (built-in):
  - Compact Flash Drive 2 GB (only with Windows Embedded 2009), or with 4, 8 or 16 GB) or
  - SSD Standard, min. 80 GB, not for PRO version
- Second mass memory (built-in):
  - Without
  - Compact Flash Drive 2, 4, 8, or 16 GByte
  - SSD High Endurance, min. 50 GByte
  - SSD Standard, min. 80 GB, not for PRO version
- Interfaces:
  - 2 x PROFINET (IE) onboard (10/100/1000 Mbit/s)
  - Optional 2 x PROFINET (IE) onboard (10/100/1000 Mbit/s) and 1 x PROFIBUS DP/MPI onboard, CP5611 compatible
  - Optional 1 x PROFINET (IE) onboard (10/100/1000 Mbit/s) and 1 x PROFINET (RT/IRT) with 3 ports, CP 1616 compatible
  - 5 x USB 2.0 port, 500 mA (1 x on front)
  - 1 x COM1 (RS232)
  - 1 x DVI-I (for connecting a second display unit)
- Free slots for expansions:
  - 1 x CompactFlash slot (accessible from outside)
- Power supply: 24 V DC

### Components of the operator control unit:

The operator control units are available in the following versions:

#### 12" Key

- 12" TFT color display, 800 x 600 pixels (SVGA)
- Membrane keyboard with international PC character set and 36 additional function keys and an integrated mouse
- USB port on the front

#### 12" Touch

- 12" TFT color display, 800 x 600 pixels (SVGA)
- Resistive analog touch screen
- USB port on the front

#### 15" Key

- 15" TFT color display, 1024 x 768 pixels (XGA)
- Membrane keyboard with international PC character set and 36 additional function keys, as well as integrated mouse
- USB port on the front

#### 15" Touch

- 15" TFT color display, 1024 x 768 pixels (XGA)
- Resistive analog touch screen
- USB port on the front

#### 19" Touch

- 19" TFT color display, 1280 x 1024 (SXGA)
- Resistive analog touch screen
- USB port on the front

**PRO 15" Touch**

- Fully enclosed device with degree of protection IP65 for mounting on a support arm/stand
- 15" TFT color display, 1024 x 768 pixels (XGA)
- Resistive analog touch screen

**PRO 19" Touch**

- Fully enclosed device with degree of protection IP65 for mounting on a support arm/stand
- 19" TFT color display, 1280 x 1024 (SXGA)
- Resistive analog touch screen

The built-in devices are equipped with an USB 2.0 interface at the front for connecting external peripherals such as a mouse or keyboard and fulfill the requirements of degree of protection IP65 and NEMA 4.

HMI IPC477C PRO 15"/19" touch devices

- For mounting on support arm/pedestal
- All-round IP65, enclosure type 4x
- 15"/19" touch display
- Rugged aluminum enclosure
- Two internal USB interfaces, one of which can be implemented with the "USB service interface" accessory part
- Adaptation of the device optionally from above or below
- Direct connection to the support arm systems from well-known manufacturers (e.g., Rittal, Bernstein, Rose, Rolec)
- Supports the globally established VESA 75/VESA 100 standard for flexible mounting
- Customer can expand the system by means of extension units

HMI, RTX, RTX F and HMI/RTX complete turnkey solutions (the software is already preinstalled and configured) for visualization and automation in combination with WinCC flexible and WinAC RTX

- Quick start in automation solutions with Embedded Automation
- HMI: SIMATIC WinCC flexible RT or SIMATIC WinCC RT Advanced preinstalled and ready to run
- RTX: SIMATIC WinAC RTX preinstalled and ready to use
- RTX F: SIMATIC WinAC RTX F preinstalled and ready to use
- HMI/RTX (F): SIMATIC WinCC flexible or SIMATIC WinCC RT Advanced and SIMATIC WinAC RTX (F) preinstalled and ready to use
- PROFIBUS and PROFINET (RT) preconfigured for use in a SIMATIC environment
- Configuration and programming with SIMATIC WinCC flexible ES and SIMATIC STEP 7 via Industrial Ethernet or PROFIBUS
- Flexibility of a PC-based automation environment

- Open for additional PC applications
- Connection option for USB devices, flat panel monitor or screen
- Use of WinAC ODK with SIMATIC WinAC RTX
- Data retentivity for WinAC RTX without uninterruptible power supply (UPS)

SIMATIC HMI IPC477C as WinCC client or single-user station

Selected hardware configuration with preinstalled software WinCC V7.0 RT or WinCC RT Professional as

- Ready-to-run client (standard and multi-client) in a WinCC multi-user station, or
- Ready-to-run single-user station with process connection

Expansion components**SIMATIC IPC DiagMonitor**

- PC diagnostics/alarm software for the early detection and diagnosis of PC problems
- Comprehensive monitoring of temperature, watchdog
- Operating hours counter for preventive maintenance
- Integrated log functions, comprehensive text messages, on-line help (English/German)
- Network-wide monitoring via SNMP and OPC interface possible

**SIMATIC IPC Image & Partition Creator**

- Software tool for preventive data back-up of the contents of bulk storage (CF cards, hard disks)
- High-speed restoring of system and data partitions with bit accuracy; user software and special installations are also backed up
- Software tool for adaptation of mass storage partitioning

**SIMATIC IPC USB FlashDrive**

- Mobile memory medium for SIMATIC PC/PG
- Fast data transfer (USB 2.0) and high memory capacity
- Ultra-compact and rugged

**SIMATIC IPC Service USB FlashDrive**

- Mobile memory medium for backing up/restoring mass memories
- Ready-installed Image & Partition Creator V3.0
- Ultra-compact and rugged

**Industrial USB Hub 4**

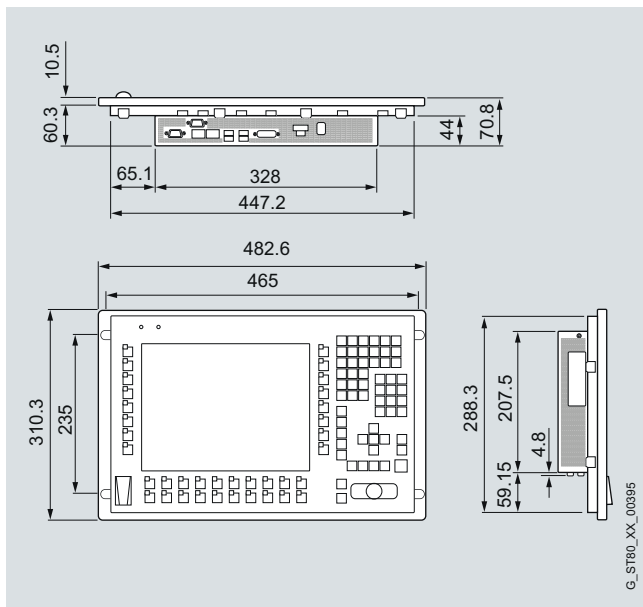
- Industry-standard USB 2.0 hub, front IP65
- Installation in control cabinet door or on DIN rail
- Inspection window and LEDs for each of the four interfaces

**Technical specifications SIMATIC HMI IPC477C**

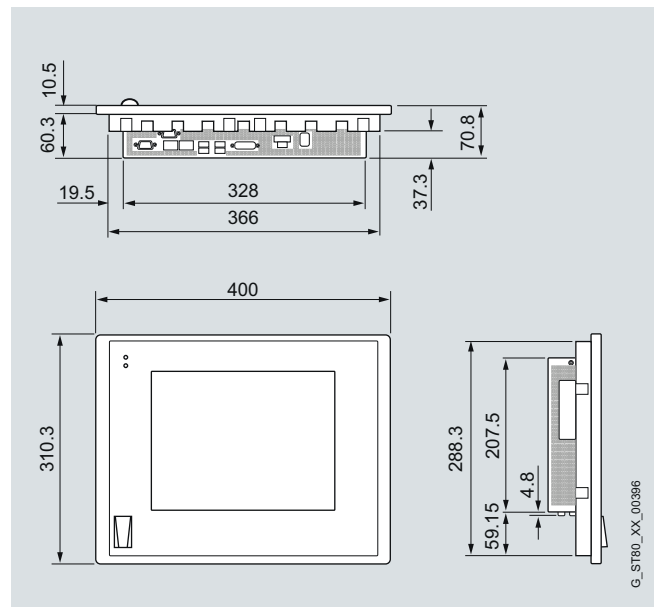
	<b>6AV7 884-1.....-...0</b>	<b>6AV7 884-2.....-...0</b>	<b>6AV7 884-3.....-...0</b>	<b>6AV7 885-5.....-....</b>
Screen diagonal	12 in.	15 in.	15 in.	19 in.
Front panel	12" TFT Key	15" TFT Touch	15" TFT Key	19" TFT Touch
Accessory components	Slide-in keyboard labels	Touch protective foil	Slide-in keyboard labels	Touch protective foil
<b>Display</b>				
Resolution (W x H in pixels)	800 x 600	1024 x 768	1024 x 768	1280 x 1024

	6AV7 884-1.....-...0	6AV7 884-2.....-...0	6AV7 884-3.....-...0	6AV7 885-5.....-....
MTBF backlighting (at 25 °C)	about 50,000 hours	about 50,000 hours	about 50,000 hours	about 50,000 hours
<b>Type of operation</b>				
Function keys	36	None	36	None
Alphanumeric keyboard	Yes	No	Yes	No
Touch screen (analog/resistive)	No	Yes	No	Yes
Mouse on the front	Yes	No	Yes	No
<b>Design</b>				
Centralized configuration	Yes	Yes	Yes	Yes
Distributed configuration	No	No	No	No
<b>Power losses</b>				
Power loss in full configuration	24 V DC: max. 60 W (incl. USB interfaces)	140 W max. (15 W included per slot)	24 V DC: max. 60 W (incl. USB interfaces)	24 V DC: max. 80 W (incl. USB interfaces)
<b>Dimensions</b>				
Installation cutout (W x H x D), in mm	450 x 290 x 75 mm device depth	450 x 290 x 108 (incl. optical drive)	450 x 321 x 75	450 x 380 x 125
Additional mounting depth required for an optical drive	No additional drive planned.	No additional drive planned.	No additional drive planned.	23 mm
<b>Weights</b>	6.6 kg	7 kg	7.2 kg	11.6 kg

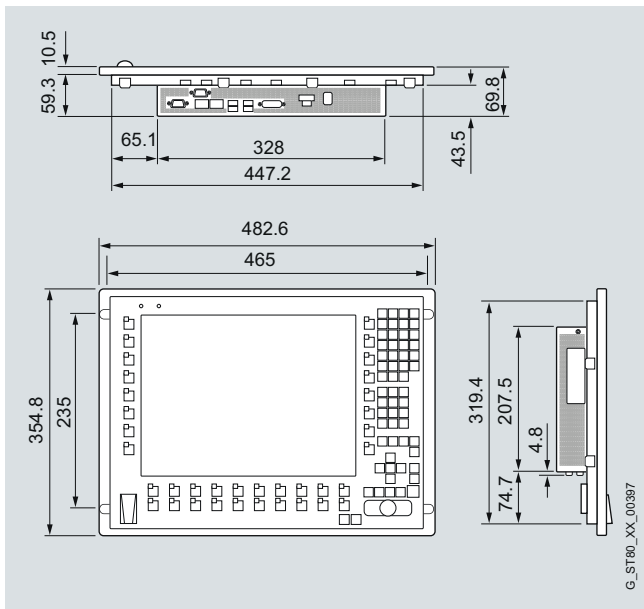
**Dimensional drawings. All dimensions in mm. For installation cut-out see technical specifications.**



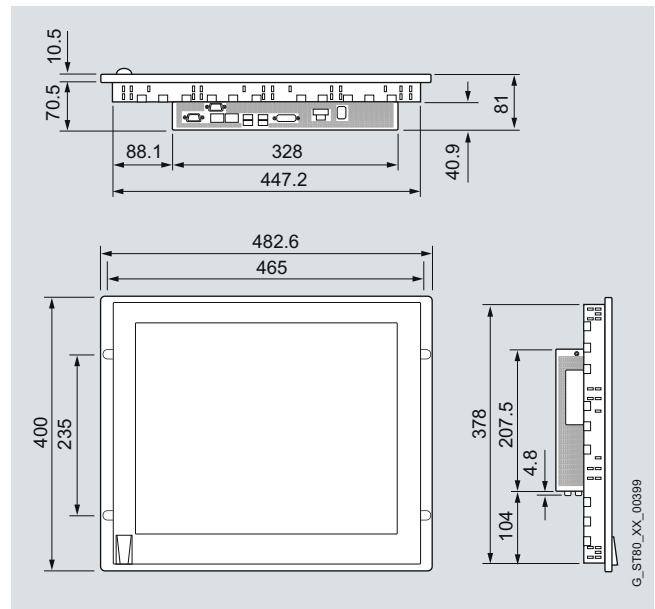
SIMATIC HMI IPC477C 12" Key version



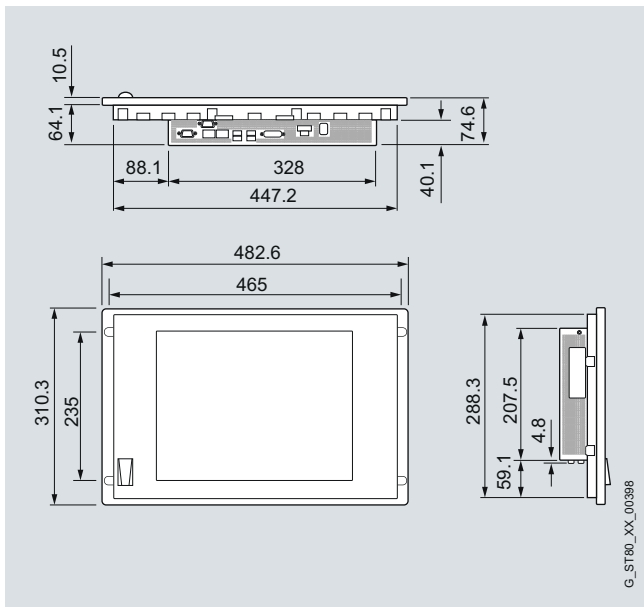
SIMATIC HMI IPC477C 12" Touch version



SIMATIC HMI IPC477C 15" Key version



SIMATIC HMI IPC477C 19" Touch version



SIMATIC HMI IPC477C 15" Touch version

SIMATIC IPC – the more Industrial PC	
More information on SIMATIC IPC is available at:	<a href="http://www.siemens.com/simatic-ipc">www.siemens.com/simatic-ipc</a>
A current overview of the configurations is provided by the SIMATIC IPC Online-Konfigurator:	<a href="http://www.siemens.com/ipc-configurator">www.siemens.com/ipc-configurator</a>
In-depth information is available in the SIMATIC manuals:	<a href="http://www.siemens.com/simatic-doku">www.siemens.com/simatic-doku</a>
Information material for download:	<a href="http://www.siemens.com/simatic/printmaterial">www.siemens.com/simatic/printmaterial</a>
Technical documentation is available in our Service& Support portal:	<a href="http://www.siemens.com/automation/support">www.siemens.com/automation/support</a>
Your personal contact partner is listed at:	<a href="http://www.siemens.com/automation/partner">www.siemens.com/automation/partner</a>
Electronic ordering via the Internet with the Mall:	<a href="http://www.siemens.com/industrymall">www.siemens.com/industrymall</a>
Additional information on PC-based Automation with SIMATIC is available under:	<a href="http://www.siemens.com/pc-based-automation">www.siemens.com/pc-based-automation</a>
Additional information on the TIA Portal:	<a href="http://www.siemens.com/tia-portal">www.siemens.com/tia-portal</a>
Additional information on SIMATIC Safety Integrated:	<a href="http://www.siemens.com/f-cpu">www.siemens.com/f-cpu</a>
Online Service Tool PED – for fast information on the equipment of your SIMATIC PC and the management of your field inventory:	<a href="http://www.siemens.com/ped">www.siemens.com/ped</a>