

SIMATIC HMI Comfort Panels

SIMATIC Live
1 dicembre 2011
inizio ore 11.00



SIMATIC HMI Comfort Panels



- **Product technologie and customer benefits**

- Positioning
- Engineering
- Drivers
- Portfolio overview
- Added value by migrating
- Order data
- Bestelldaten
- Order data

SIMATIC HMI Comfort Panels

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-  **Integrated functionality of all Comfort Panels**
-  **Widescreen Display with LED backlighting**
-  **Increased data security for archives and recipes**
-  **Innovative service concept**
-  **State-of-the-art energy management with PROFlenergy**
-  **Portrait installation possible for all touch devices**

SIMATIC HMI Comfort Panels

Integrated functionality of all Comfort Panels

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**Archives, scripts, Internet Explorer, PDF/Excel/Word viewer,
Media Player, F(x) – functions, system diagnostics viewer**

The Comfort panels allows customers to choose the display that is right for them while benefiting from standardized, high-end panel functionality

SIMATIC HMI Comfort Panels

Integrated functionality of all Comfort Panels

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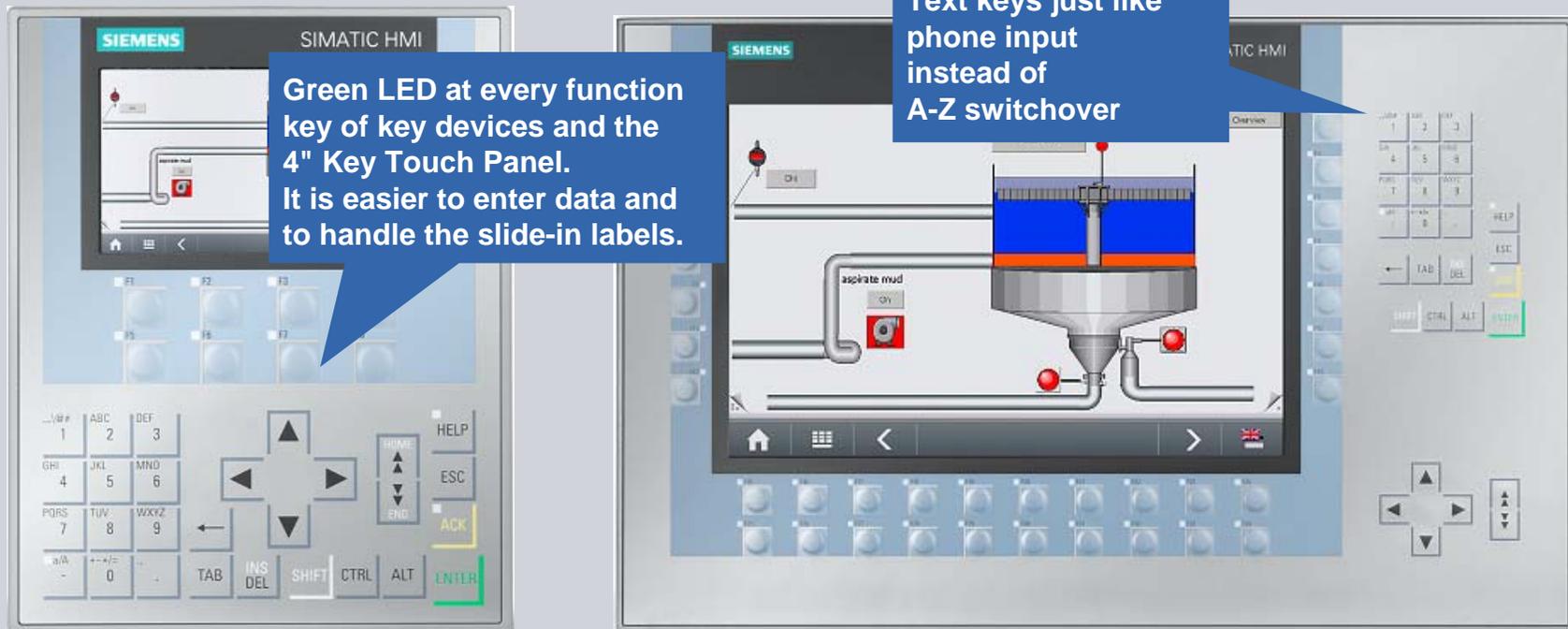


The Comfort panels feature a durable aluminum front-side casings starting with the 7-inch model

SIMATIC HMI Comfort Panels

Integrated functionality of all Comfort Panels

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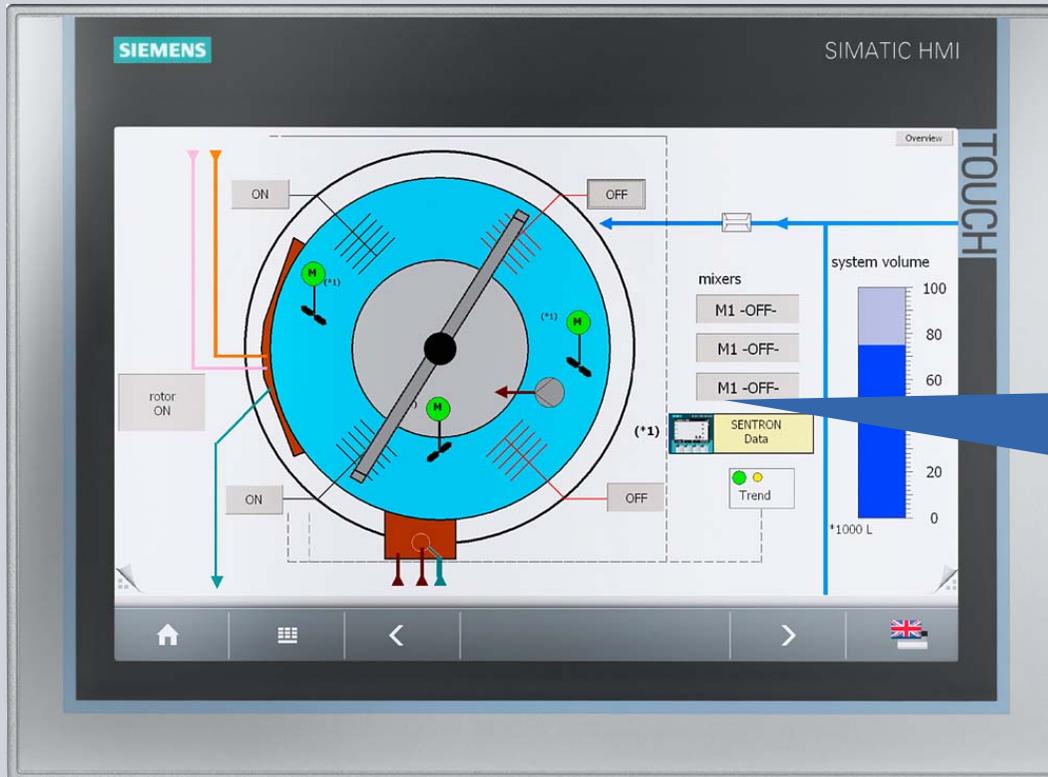


Ergonomic key operation, a new data entry mechanism
And the keypad with tactile feedback.

SIMATIC HMI Comfort Panels

Integrated functionality of all Comfort Panels

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Buffered real-time clock (without battery) and automatic time synchronization with the S7-1200 (FW version 2.0)

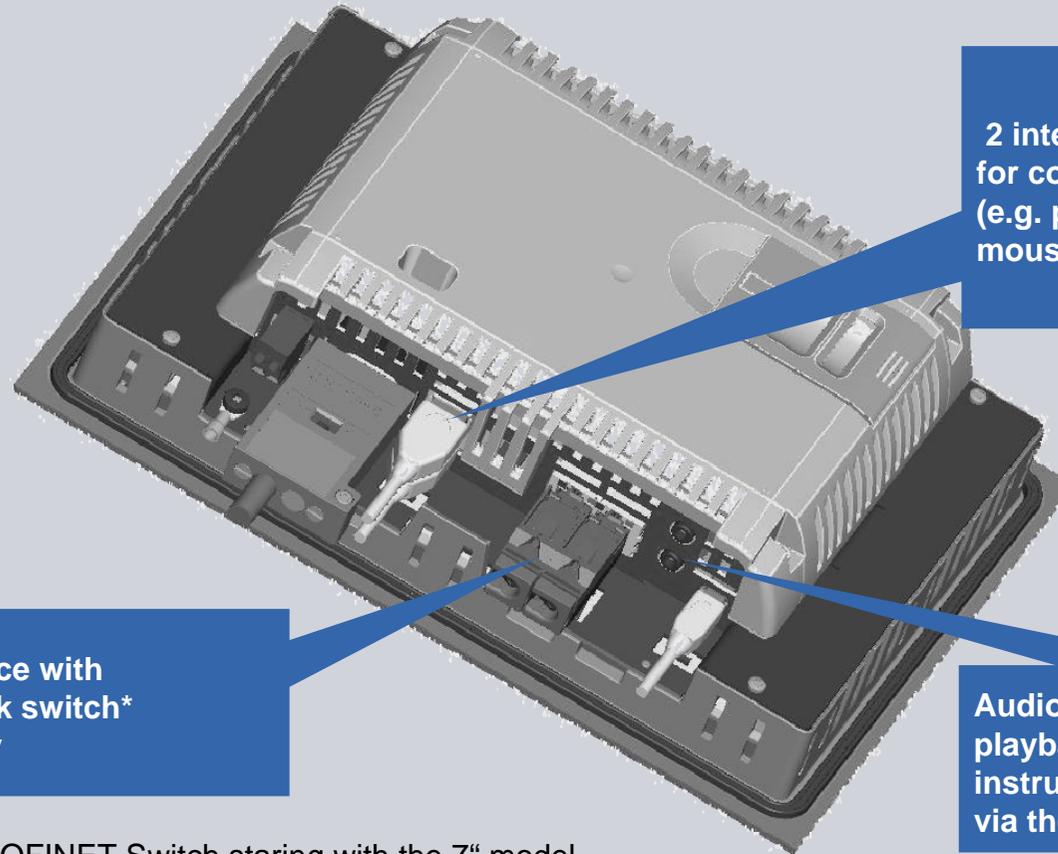
Panel Ethernet settings can be configured with engineering software

Integrated functionality for fast commissioning and increased application transparency

SIMATIC HMI Comfort Panels

Integrated functionality of all Comfort Panels

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2 integrated USB host interfaces for connecting external devices (e.g. printer, USB flash drives, mouse, or keyboard)

PROFINET interface with integrated network switch* Incl. PROFinergy

Audio In/ Audio Out interface for playback of e.g. maintenance instructions via the Media Player

*) integrated PROFINET Switch starting with the 7" model

The Comfort panels convince with reduced hardware costs due to extended interfaces

SIMATIC HMI Comfort Panels Widescreen Display

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High-end widescreen displays allow processes to be visualized in detail, promote better process control, and offer a display area that is up to 40 percent larger.

SIMATIC HMI Comfort Panels Widescreen Display

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The widescreen display of the Comfort Panels with very high resolution, 16 million colors, a viewing angle of up to 170° and dimmable backlighting (0-100%)

High End Widescreen Displays for detailed visualization, a high degree of user friendliness, improved readability, and longer life time

SIMATIC HMI Comfort Panels Increased data security

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Built-in protection against voltage failure safeguards process-relevant data.

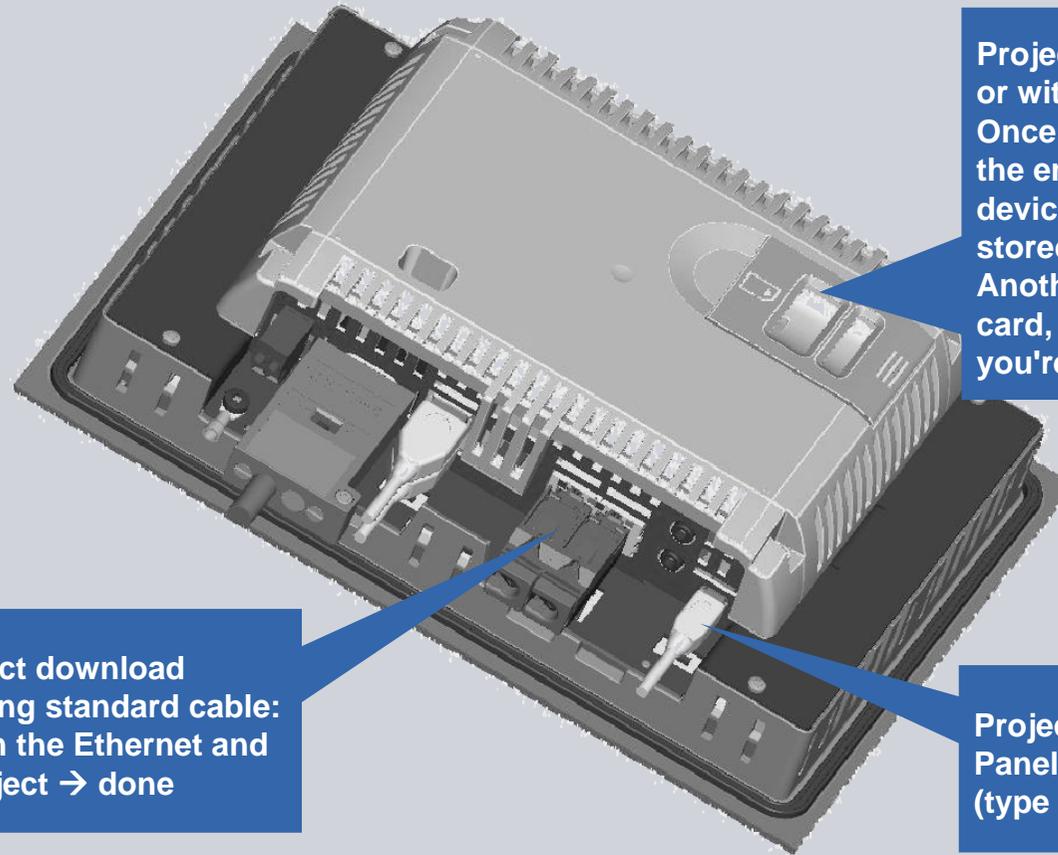
No additional uninterruptible power supply is required.

The Comfort panels safeguard the overall device as well as archives/recipes against voltage failure using removable SD cards.

SIMATIC HMI Comfort Panels

Innovative service concept

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Project transfer via download or with an SD card: Once downloaded, the entire project and all device configuration data are stored on the system card (SD). Another panel - "Simply insert the card, confirm the prompt, and you're done"

Transparent project download via PROFINET using standard cable: Select the panel in the Ethernet and download the project → done

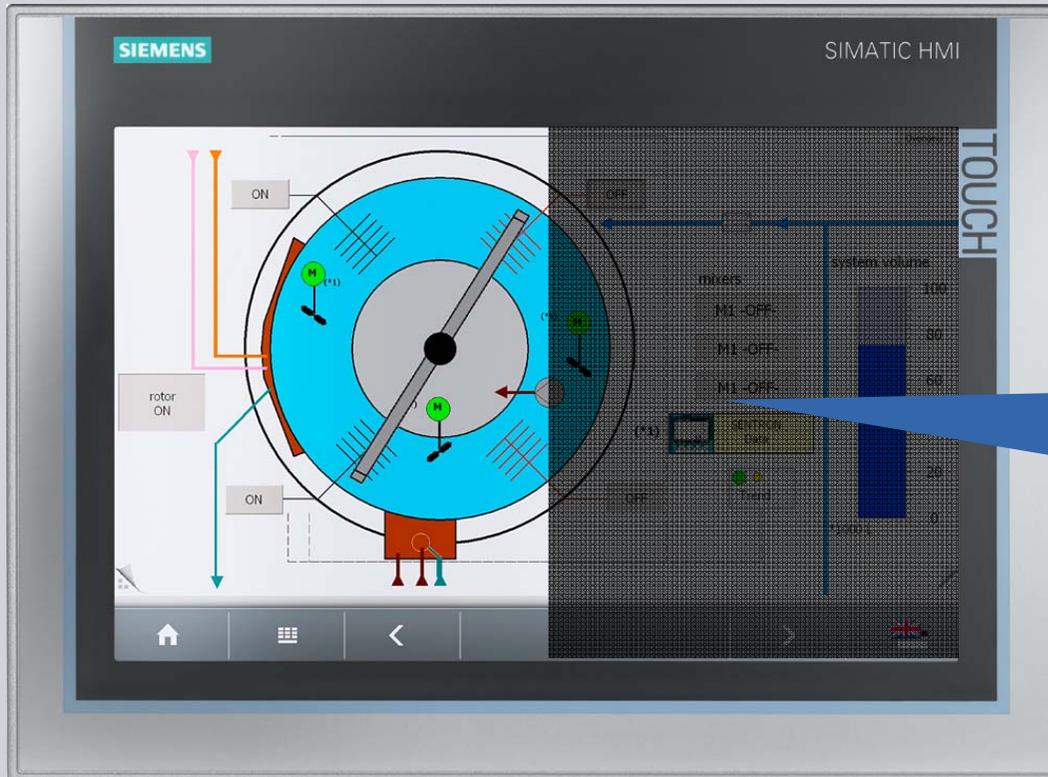
Project download to Comfort Panels using standard USB cable (type A - B mini).

Project download to the Comfort panels can be done via standard cable.

SIMATIC HMI Comfort Panels

Energy management with PROFlenergy

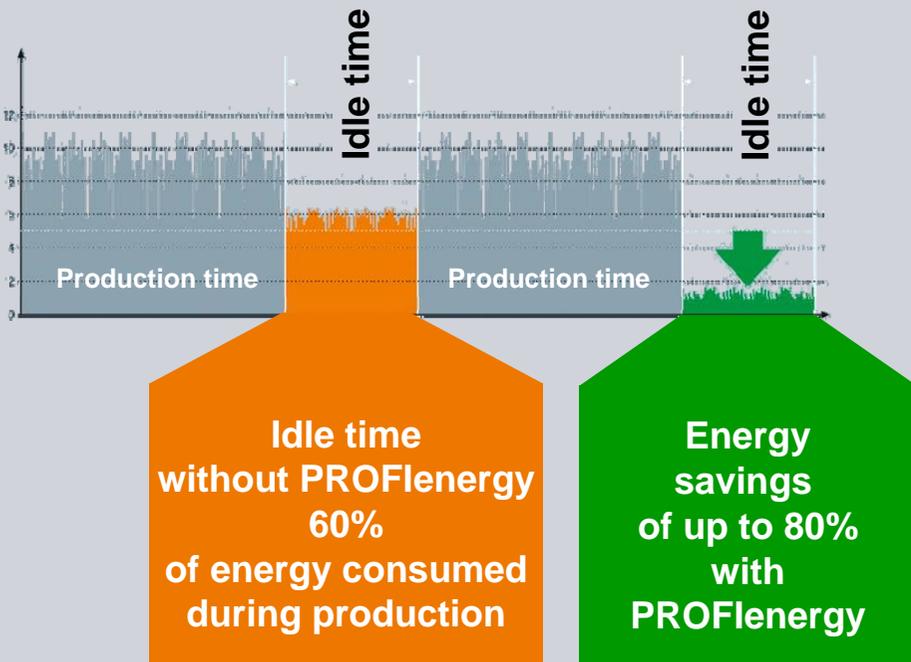
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The display of the Comfort Panels can be switched off centrally and in a coordinated manner during periods of non-use. The energy consumption of the overall application will be reduced.

The standardized PROFlenergy protocol enables consumers that are no longer required to be switched off centrally and energy readings to be captured

Dynamic energy management with PROFlenergy



PROFlenergy...

-  ...forms the basis for active load management
-  ...facilitates high plant availability by coordinating switch points
-  ...with selective switching makes it possible to save energy even during short idle times
-  ... Investment protection due to simple, reaction-free integration in existing standards

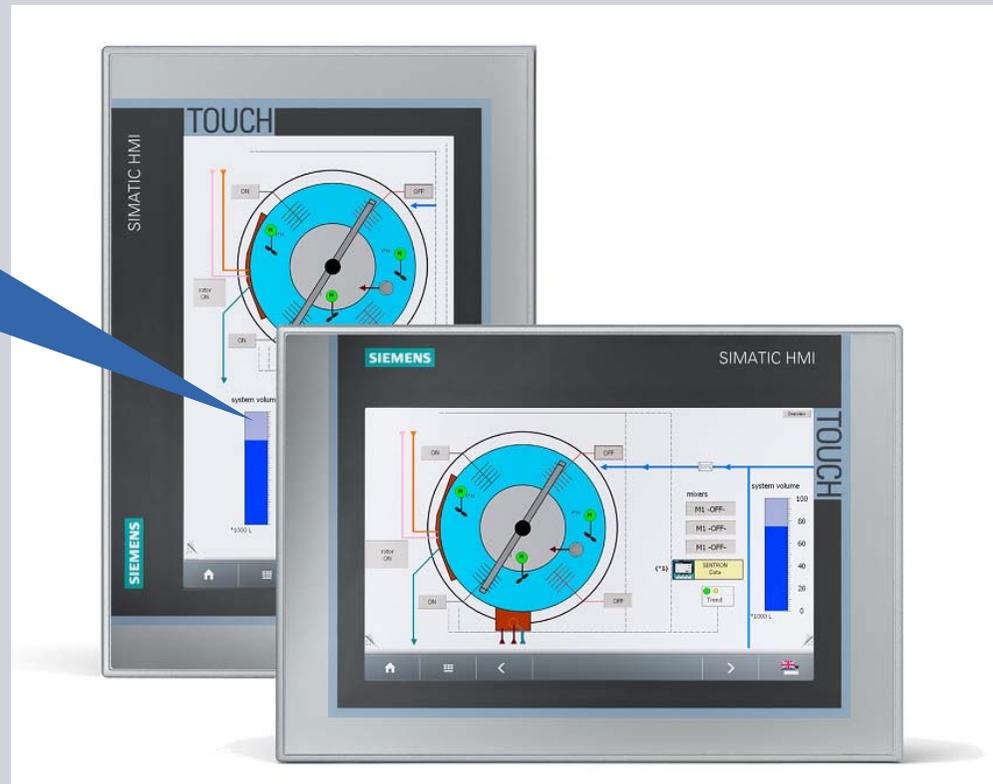
The standardized PROFlenergy protocol enables consumers that are no longer required to be switched off centrally and energy readings to be captured

SIMATIC HMI Comfort Panels

Touch device mounting positions

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The SIMATIC Comfort Panels offer analog-resistive touch devices with 4-wire technology



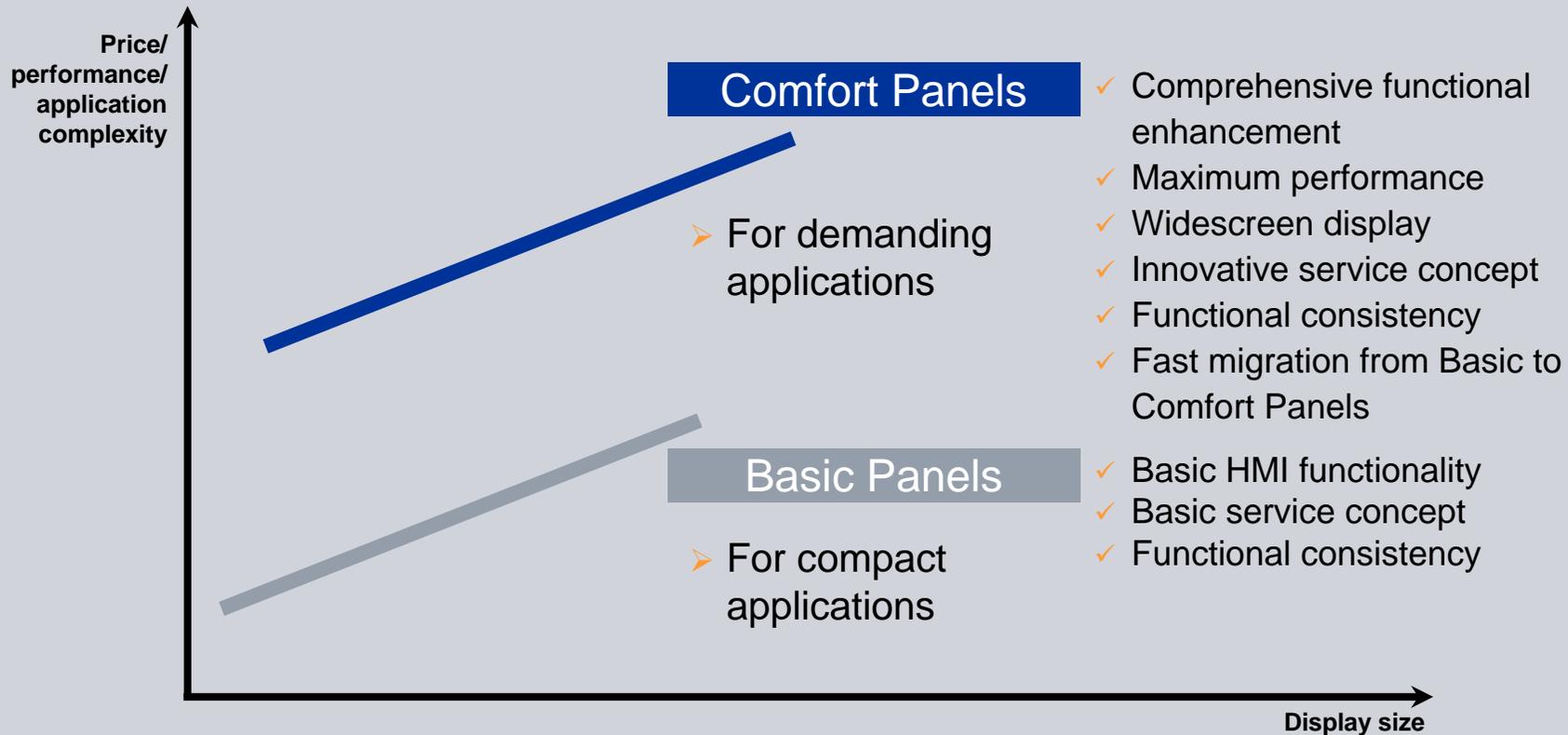
All Comfort panel touch devices can be operated in portrait or landscape mode, depending on application requirements and available space.

SIMATIC HMI Comfort Panels



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Positioning Basic Panels and Comfort Panels

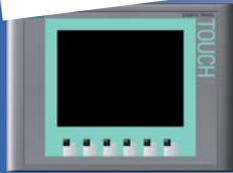


Positioning: SIMATIC Panels and Panel PCs

The right visualization for every application

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Performance, flexibility, & compatibility



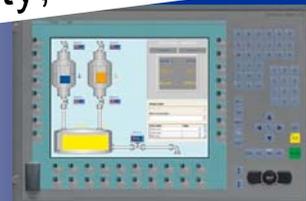
- Up to 500 tags
- Not expandable
- Single interface
- No Sm@rt options

**SIMATIC HMI
Basic Panels**



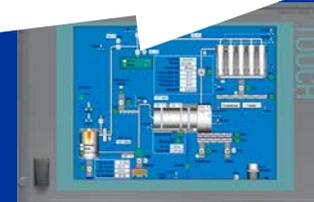
- High-end panel architecture
- Sm@rt options
- No soft PLC
- Touch and key
- Panel exchange w/o PG
- MS Office viewer & Internet Explorer

**SIMATIC HMI
Comfort Panels**



- Open PC architecture
- No hard disk
- No fan
- Panel exchange w/o PG

**SIMATIC
HMI IPC477C**



- Open PC architecture
- Expandable
- DVD drive

**SIMATIC
HMI IPC577C**



- Maximum performance and PC compatibility
- Freely configurable options

**SIMATIC
HMI IPC677C**

The Comfort panels are clearly positioned in the balanced SIMATIC HMI portfolio.

HMI Basic & Comfort Panels

Target applications/customer segments



Criterion	HMI Basic Panel	HMI Comfort Panels	Panel PC HMI IPC277D
Applications	Machine-oriented HMI		
Additional applications	---	---	Controlling, measuring, regulating, data processing and archiving, PC applications
Engineering	WinCC Basic or WinCC Flexible 2008	WinCC Comfort	PC, PC operating systems, as required: WinCC Advanced, WinAC RTX, C/C++, Visual Basic, etc.
Ready to use	No further steps required	No further steps required	SW bundles preinstalled; license key must be transferred
Certificates	CE, UL	CE, UL, shipbuilding FM Class I Div. II, ATEX 2/22	CE, UL, shipbuilding
Configuration option	One order number for each display size and interface	One order number for each display size	Configurable
Delivery time (from ramp)	Stocked product	Stocked product	Built-to-order (15 working days)*
Spare parts/repair	Replacement or repair	Replacement or repair	Repair*
Service, availability of spare parts	10 years	10 years	5 years

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* Preferred variants and replacement device in clarification

Industry Sector

HMI Basic & Comfort Panels

Functional differentiation (1)



Criterion	HMI Basic Panel	HMI Comfort Panels	Panel PC HMI IPC277D
Open	Closed/ no WinCC SW options	Closed/ WinCC SW options	Open WinCC SW options Standard PC applications Integration of customer applications
Expandable (PC cards, memory)	---	---	---
Front sides	4:3, monochromatic or 256 colors	Uniform widescreen front sides: High resolution, 16 million colors, large viewing angle, dimable LED backlight	
Display sizes	3" – 15" ; 4:3	4" - 22" widescreen	7" - 17" widescreen
Type of operation	KP300 keys, touch and keys from 4" to 10", touch 15"	Touch and Keys (4") Touch or keys (7"to 15")	Touch
Direct keys	---	DP and PN direct keys (touch as well)	---
Portrait installation	Possible for 6"	Possible for all touch devices	---
Front-side interface	---	---	USB for 15"/17"
Interfaces (rear), fieldbus on board	1x PN (3", 4", 6", 10" & 15") or 1x DP (6" & 10")	2x 10/100 Mbit/s Ethernet / PROFINET with RT; 1x RS485/422/PROFIBUS; 3x USB V2.0 (1 of which is a USB device) <i>4", see slide 33</i>	2x 10/100/1000 Mbit/s Ethernet / PROFINET with RT; 3x USB V2.0; 1x COM (RS232)
Drives	---	1x SD slot (data), 1x SD slot (for servicing)	1x CompactFlash (accessible) or solid-state drive (internal)

HMI Basic & Comfort Panels

Functional differentiation (2)



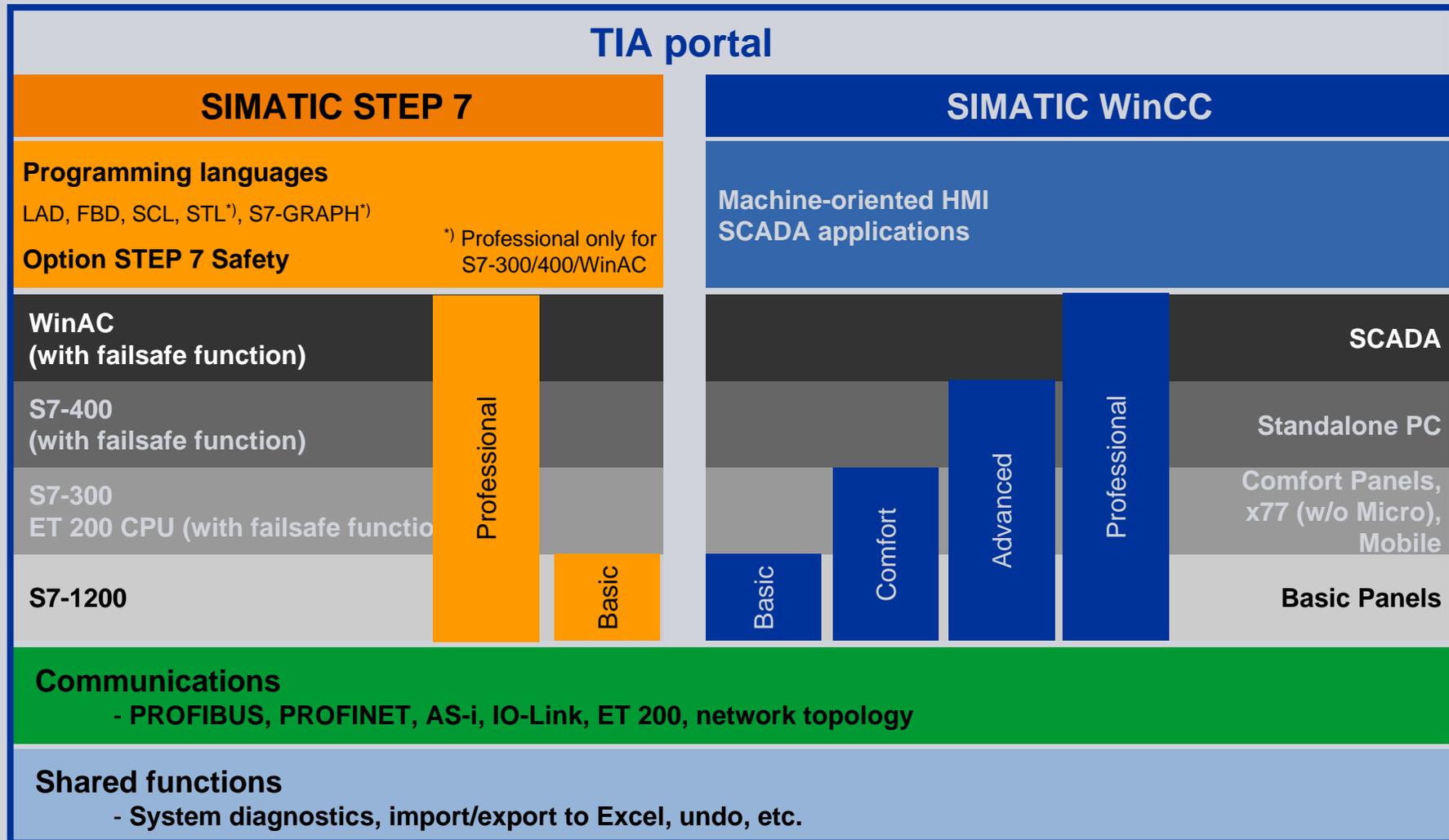
Criterion	HMI Basic Panel	HMI Comfort Panels	Panel PC HMI IPC277D
Operating system	Linux based	Windows CE	Windows Embedded Standard 2009 Windows XP Professional WES 7 / Windows 7 in preparation
Virus protection	Not susceptible to viruses	Not susceptible to viruses	Typical PC virus protection recommended; BeSy + application protection via EWF
HMI SW runtime	WinCC flexible 2008 or WinCC 10.5 and higher KP300 from WinCC V11	WinCC V11	
HMI quantity structures (tags)	Graduated	Graduated	Configurable
HMI retentive messages	Retentive message buffer		
HMI engineering	From WinCC basic	From WinCC comfort	From WinCC advanced
Software controller	---	---	WinAC RTX (F) optional
Environment	Front side: IP65 Operating temperature: 0 to 50 °C		
Powerfail concept	Non-volatile	Non-volatile incl. archives	Protection against voltage failure for BeSy and application software possible via write protection (EWF); optional retentive data buffer
System diagnostics	---	SIMATIC system diagnostics viewer	
Additional HW diagnostics	---	---	IPC hardware diagnostics: Temperature, mass memory, operating hours counter

SIMATIC HMI Comfort Panels



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The TIA portal: Intuitive, efficient, cutting-edge engineering



Intuitive, efficient, cutting-edge engineering with the TIA portal

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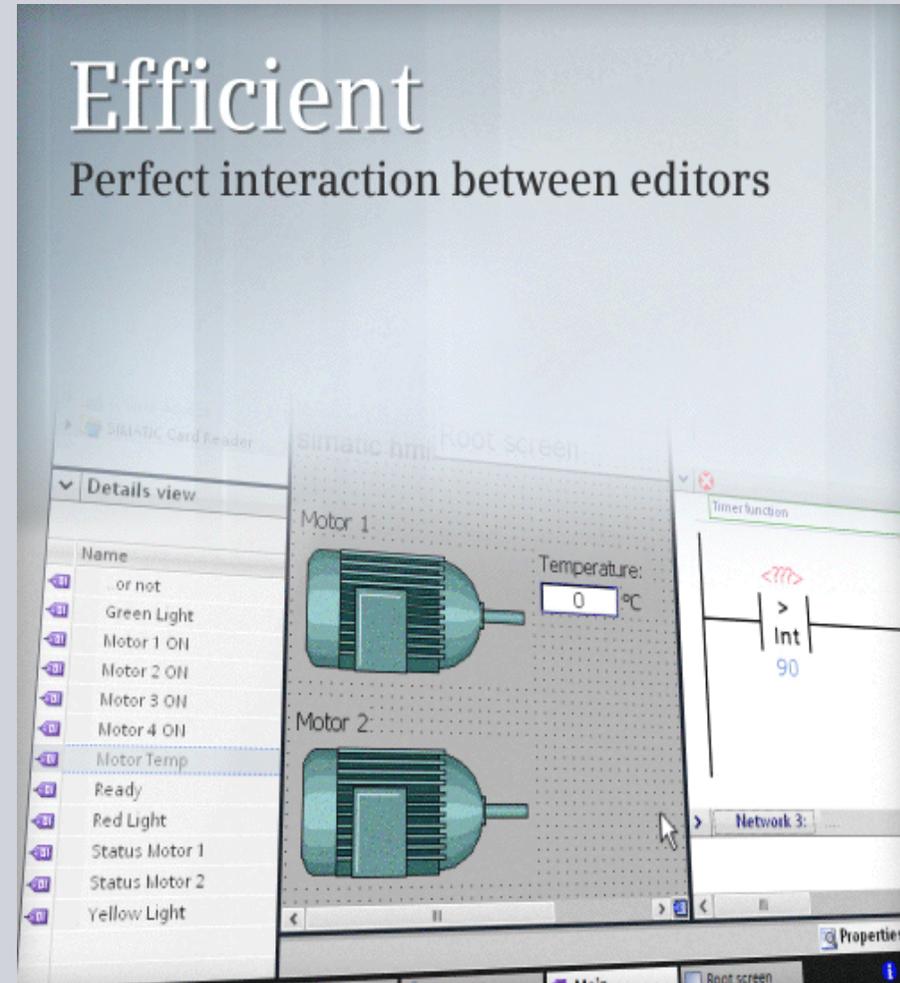
Short
time-to-market

**Interaction of
controller and HMI**

Reduction of
total cost of ownership

Efficient

Perfect interaction between editors



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The TIA portal: optimal interaction between the controller and HMI

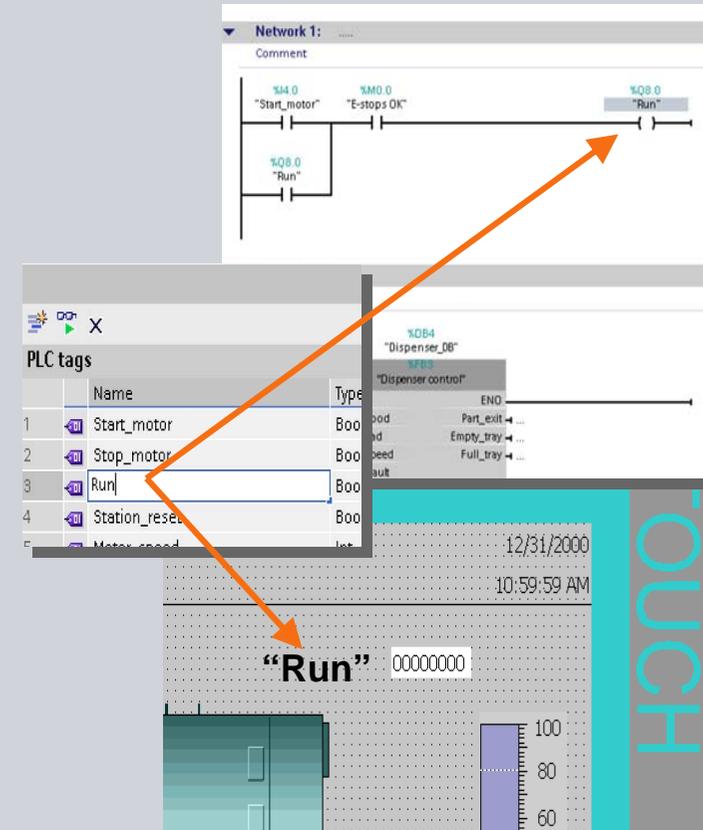
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Intelligent drag-&-drop function for editors

- Dragging a controller tag from a tag table, programming editor, or device view onto the HMI screen automatically creates a/an:
 - Connection
 - HMI tag
 - I/O field

Consistent data throughout the project

- Changes to tags are immediately implemented in all editors throughout the project



The intelligent drag & drop function and data consistency reduce your engineering outlay considerably

Intuitive, efficient, solid engineering

The screenshot displays the Siemens WinCC Graphics Designer software interface. The main workspace shows a process control screen with three vertical tanks, each labeled '000'. Below each tank is a pump icon and a control panel with 'Start' (green) and 'Stop' (red) buttons. A 'WinCC FunctionTrendControl' window is overlaid on the right, showing a graph with a scale from 0 to 1.00 and a 'Ready' status. A vertical 'TOUCH' label is positioned on the right side of the screen. The interface includes a 'Project tree' on the left, a 'Toolbox' on the right, and a 'Details view' at the bottom left. The status bar at the bottom indicates 'Project My 1st project opened'.

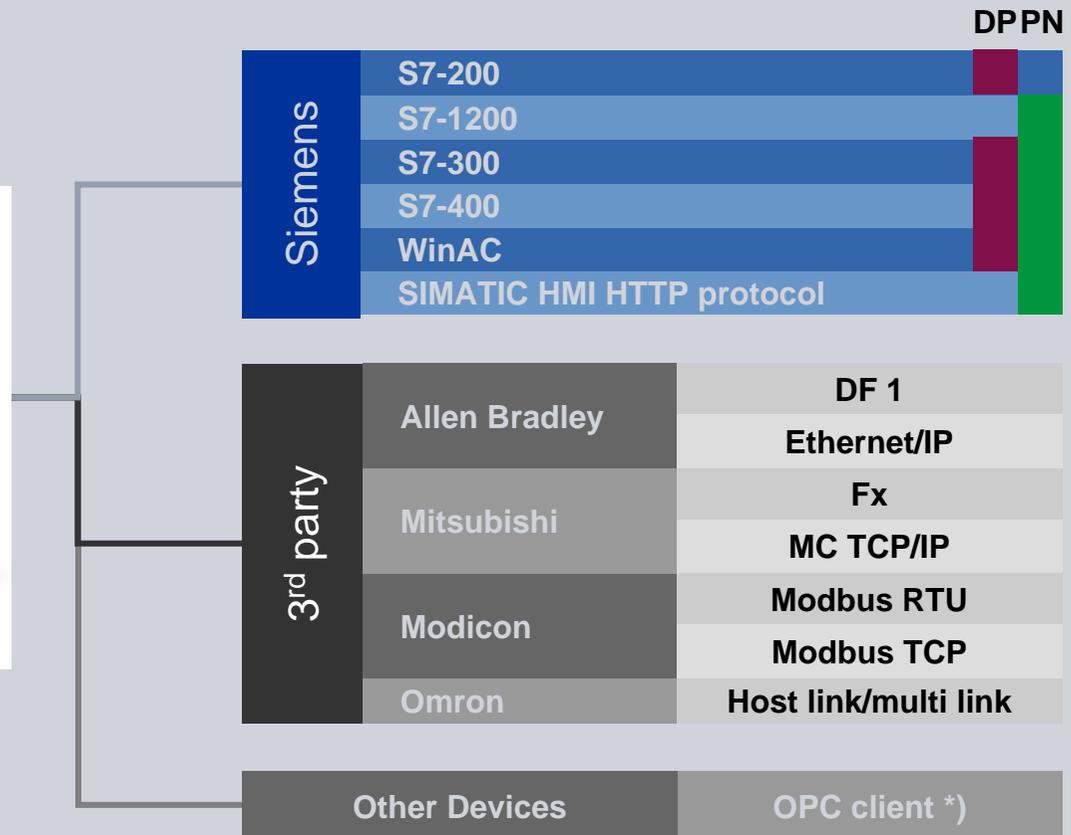
SIMATIC HMI Comfort Panels



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SIMATIC HMI Comfort Panel

Controller connection: SIMATIC and 3rd party



*) OPC-UA planned

SIMATIC HMI Comfort Panels



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Overview of Comfort Panels (4" to 12")



SIMATIC HMI Comfort Panels

Technical highlights

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Widescreen displays

High resolutions, 16 mil. colors, large viewing angle, LED backlighting

High performance

More than twice as fast as the MP 277

Enhanced functionality

Archives, scripts, IE, PDF/Excel/Word viewer, 0 - 100% dimming

New service concept

"Panel exchange without PG", USB device interface

Onboard interfaces

1 PN, PB, 2 USB

2 PN, 1 PB, 3 USB, audio

Aluminum casing

Aluminum front-side casings

Portrait installation

Portrait installation for all Touch Panels to 12"

Improved data entry

Push Button Panels with new cell phone-type data entry mechanism

The Comfort panels offer high-end functionality down to the 4" device.

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SIMATIC HMI Comfort Panels

Technical data

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	4" W	7" W	9" W	12" W
Display sizes	4.3"	7.0"	9.0"	12.1"
Resolution	480 x 272	800 x 480		1,280 x 800
Processor	ARM 532 MHz	x86 500 MHz		
Project memory	4 MB	12 MB		
Tags	1024	2048		
Messages	2000	4000		
Recipes	100 / 200 / 200*	300 / 500 / 1000*		
Images	500	500		
Archives	10 / 10.000**	50 / 20.000**		
Scripts	50	100		
Viewer/multimedia	Internet Explorer, PDF, Word- and Excel viewer, multimedia player			
Sm@rtAccess/Service	Yes			

*) recipes / data sets per recipe / entries per data set

**) Archives / entries per archive

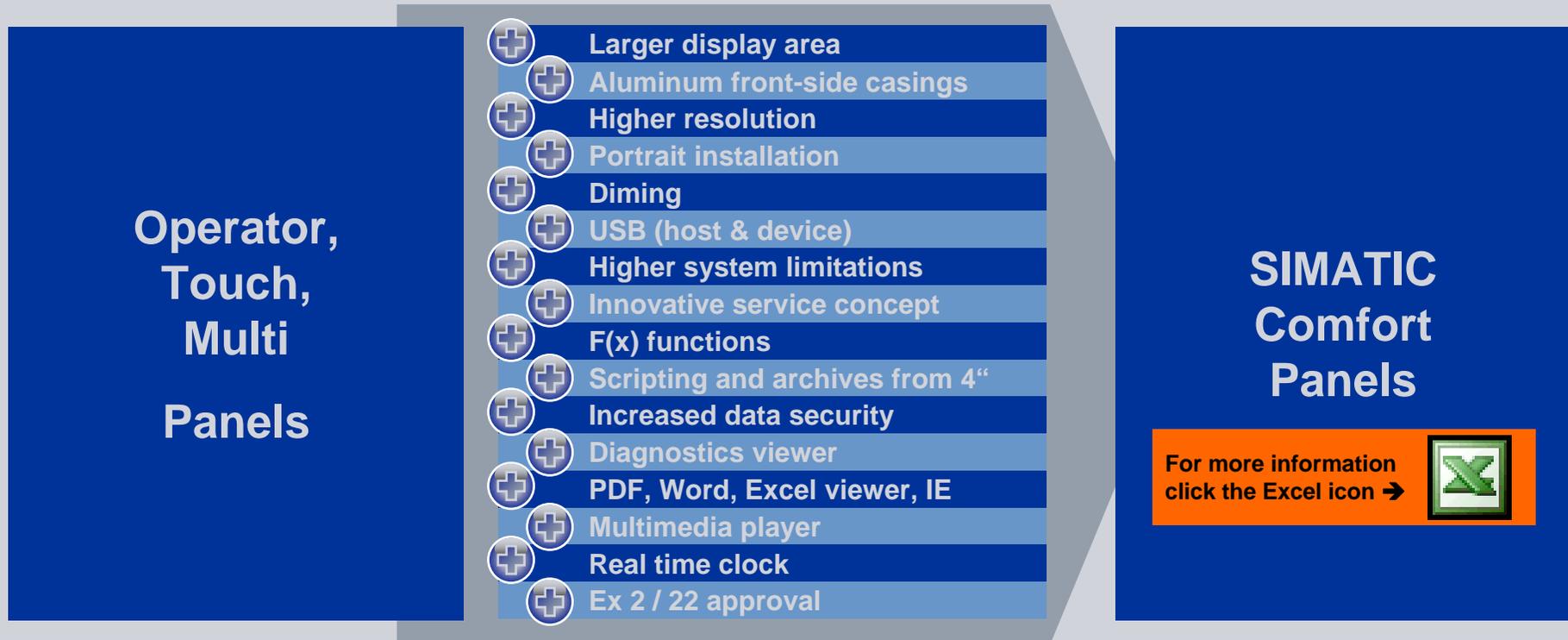
The Comfort panels offer high-end functionality down to the 4" device.

SIMATIC HMI Comfort Panels



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Added value by migrating to the Comfort Panels



[SIMATIC HMI Comfort Panels – Migration guide](#)

Upgrading to the Comfort panels offers many benefits and allows customer applications to be optimized.

Added value by migrating to the Comfort Panels Installation compatibility and larger display area



The widescreen displays increase usable display area by up to 40 percent when compatible with the installation location.

SIMATIC HMI Comfort Panels



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Order data for the Comfort Panels

	Product name	MLFB
Touch	KTP400 Comfort	6AV2124-2DC01-0AX0
	TP700 Comfort	6AV2124-0GC01-0AX0
	TP900 Comfort	6AV2124-0JC01-0AX0
	TP1200 Comfort	6AV2124-0MC01-0AX0
Key	KP400 Comfort	6AV2124-1DC01-0AX0
	KP700 Comfort	6AV2124-1GC01-0AX0
	KP900 Comfort	6AV2124-1JC01-0AX0
	KP1200 Comfort	6AV2124-1MC01-0AX0

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SIMATIC HMI Comfort Panels Starter kits



Starter kit content:

- Comfort Panel
- WinCC V11 Comfort Edition
- SIMATIC HMI Manual Collection
- Ethernet cable
- SIMATIC HMI Memory Card 2GB
- Protective Membrane

Produkt	MLFB
Starterkit KTP400 Comfort	6AV2181-4DB20-0AX0
Starterkit KP400 Comfort	6AV2181-4DB10-0AX0
Starterkit TP700 Comfort	6AV2181-4DB00-0AX0
Starterkit KP700 Comfort	6AV2181-4GB10-0AX0
Starterkit TP900 Comfort	6AV2181-4JB00-0AX0
Starterkit KP900 Comfort	6AV2181-4JB10-0AX0
Starterkit TP1200 Comfort	6AV2181-4MB00-0AX0
Starterkit KP1200 Comfort	6AV2181-4MB10-0AX0

The Starter kits with a price advantage of about 20 % compared to the single prices.

SIMATIC HMI Comfort Panels

Accessories

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Protective Membranes	MLFB
10x for KTP400 Comfort	6AV2124-6DJ00-0AX0
10x for TP700 Comfort	6AV2124-6GJ00-0AX0
10x for TP900 Comfort	6AV2124-6JJ00-0AX0
10x for TP1200 Comfort	6AV2124-6MJ00-0AX0

Memory Card	MLFB
SIMATIC HMI Memory Card 2 GB	6AV2181-8XP00-0AX0



Service Packages	MLFB
Mounting clamps : 20 plastic-clamps	6AV6671-8XK00-0AX2
Mounting clamps: 20 Aluminum-clamps	6AV6671-8XK00-0AX0
Service package 24V Plug-ins: 10 pcs.	6AV6671-8XA00-0AX0

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Comfort Panels Digital Express Design

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Customization of machines:

- Photo-realistic designs up to 600dpi
- Already available with a minimum quantity of 3 units
- Creation within 5 working days only
- For all SIMATIC HMI touch panels (TP)



Link to sales release:

<http://support.automation.siemens.com/WW/view/en/49486400>

**The Digital Express Design is the fastest and most flexible way
to realize customized design fronts in industry quality**

Thank you for your attention!



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