

PC-based Automation

Industrial monitors and thin clients

SIMATIC Industrial Thin Client

Overview



SIMATIC ITC Industrial Thin Clients are powerful operating units for flexible use in distributed visualization applications. All devices are equipped with high-resolution, brilliant widescreen displays, and due to the diverse communication protocols they can be used both for challenging machine-level operator control & monitoring and for the connection to control systems, e.g. in the SCADA environment. They can be used as (additional) operator stations on a SIMATIC Industrial PC, Panel PC, or server, and on a SIMATIC Panel.

The following installation versions are available:

- SIMATIC ITC1200 – 12" Touch
- SIMATIC ITC1500 – 15" Touch
- SIMATIC ITC1900 – 19" Touch
- SIMATIC ITC2200 – 22" Touch

In addition to these devices, we continue to offer the SIMATIC Thin Client 10", SIMATIC Thin Client 15", and SIMATIC Thin Client PRO 15" for solutions in 4:3 format. These differ technically from the SIMATIC ITC. For more details, refer to the SIMATIC Thin Client chapter.

The SIMATIC HMI Thin Client Ex is available for hazardous areas. This device differs technically from the devices mentioned above. For more details, refer to the SIMATIC Thin Client EX chapter.

Technical specifications

	6AV6 646-1AA22-0AX0	6AV6 646-1AB22-0AX0	6AV6 646-1AC22-0AX0	6AV6 646-1AD22-0AX0
Display				
Screen diagonal	12.1 in	15.4 in	18.5 in	21.5 in
Display width	261.1 mm	331.2 mm	409.8 mm	495.6 mm
Display height	163.2 mm	207 mm	230.4 mm	292.2 mm
Type	TFT widescreen display, LED backlighting	TFT widescreen display, LED backlighting	TFT widescreen display, LED backlighting	TFT widescreen display, LED backlighting
Number of colors	16 777 200	16 777 200	16 777 200	16 777 200
Resolution (pixels)				
• Horizontal image resolution	1 280	1 280	1 366	1 920
• Vertical image resolution	800	800	768	1 080
General features				
• PDF reader	Yes	Yes	Yes	Yes
Backlighting				
• Backlighting (type)	LED, dimmable	LED, dimmable	LED, dimmable	LED, dimmable
• Dimmable backlight	Yes; 5-100 %	Yes; 5-100 %	Yes; 5-100 %	Yes; 5-100 %
Control elements				
Mouse/cursor control				
• USB	Yes	Yes	Yes	Yes
Keyboard fonts				
• external keyboard				
- USB	Yes	Yes	Yes	Yes
Touch operation				
• Design as touch screen	Yes	Yes	Yes	Yes
- Analog, resistive	Yes	Yes	Yes	Yes
• Touch keyboard	Yes	Yes	Yes	Yes
Installation type/mounting				
Built-in unit	Yes	Yes	Yes	Yes

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Technical specifications (continued)

	6AV6 646-1AA22-0AX0	6AV6 646-1AB22-0AX0	6AV6 646-1AC22-0AX0	6AV6 646-1AD22-0AX0
Supply voltage				
Type of actuation	24 V DC	24 V DC	24 V DC	24 V DC
permissible range, lower limit (DC)	19.2 V	19.2 V	19.2 V	19.2 V
permissible range, upper limit (DC)	28.8 V	28.8 V	28.8 V	28.8 V
Input current				
Current consumption	1.2 A	1.5 A	1.3 A	2.2 A
Inrush current A ² s	0.5 A ² ·s	0.5 A ² ·s	0.5 A ² ·s	0.5 A ² ·s
Interfaces				
USB on the rear	2	2	2	2
USB at the front	0	0	0	0
Industrial Ethernet				
• Transmission rate, max.	1 000 Mbit/s	1 000 Mbit/s	1 000 Mbit/s	1 000 Mbit/s
• Number of industrial Ethernet interfaces	1	1	1	1
Protocols				
Protocols (Ethernet)				
• TCP/IP	Yes	Yes	Yes	Yes
• DHCP	Yes	Yes	Yes	Yes
• SNMP	Yes	Yes	Yes	Yes
• DCP	Yes	Yes	Yes	Yes
• LLDP	Yes	Yes	Yes	Yes
WEB characteristics				
• HTTP	Yes	Yes	Yes	Yes
• HTML	Yes; HTML5	Yes; HTML5	Yes; HTML5	Yes; HTML5
• XML	Yes	Yes	Yes	Yes
• CSS	Yes	Yes	Yes	Yes
• JavaScript	Yes	Yes	Yes	Yes
Protocols (terminal link)				
• Sm@rtServer	Yes	Yes	Yes	Yes
• RDP	Yes	Yes	Yes	Yes
• VNC viewer	Yes	Yes	Yes	Yes
• Citrix	No	No	No	No
• SINUMERIK	Yes	Yes	Yes	No
Protocols				
PROFINET IO Device				
• Services				
- PROFINET	No	No	No	No
Degree and class of protection				
IP65 at front	Yes	Yes	Yes	Yes
IP20 rear	Yes	Yes	Yes	Yes
Standards, approvals, certificates				
CE	Yes	Yes	Yes	Yes
KC approval	Yes	Yes	Yes	Yes
cULus	Yes	Yes	Yes	Yes
C-TICK	Yes	Yes	Yes	Yes
Use in hazardous areas				
• cULus Class I Zone 1	No	No	No	No
• cULus Class I Zone 2, Division 2	Yes; Available soon	Yes; Available soon	Yes; Available soon	Yes; Available soon
• FM Class I Division 2	Yes; Available soon	Yes; Available soon	Yes; Available soon	Yes; Available soon

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Technical specifications (continued)

	6AV6 646-1AA22-0AX0	6AV6 646-1AB22-0AX0	6AV6 646-1AC22-0AX0	6AV6 646-1AD22-0AX0
Ambient conditions				
Min. ambient temperature	0 °C	0 °C	0 °C	0 °C
Max. ambient temperature	50 °C	50 °C	45 °C	45 °C
Storage/transport temperature				
• Min.	-20 °C	-20 °C	-20 °C	-20 °C
• max.	60 °C	60 °C	60 °C	60 °C
Relative humidity				
• Relative humidity during operation	90 %	90 %	90 %	90 %
Software				
Web browser	Yes	Yes	Yes	Yes
Configuration				
• On-board	Yes	Yes	Yes	Yes
• Remote administration	Yes; With Remote Configuration Center (RCC) as of V2.0	Yes; With Remote Configuration Center (RCC) as of V2.0	Yes; With Remote Configuration Center (RCC) as of V2.0	Yes; With Remote Configuration Center (RCC) as of V2.0
Languages				
Online languages				
• German	Yes	Yes	Yes	Yes
• English	Yes	Yes	Yes	Yes
I/O				
I/O devices				
• USB memory	Yes; USB storage media can be connected	Yes; USB storage media can be connected	Yes; USB storage media can be connected	Yes; USB storage media can be connected
Mechanics/material				
Type of housing (front)				
• Aluminum	Yes	Yes	Yes	Yes
Dimensions				
External dimensions (W x H x D)				
• Width	330 mm	415 mm	483 mm	560 mm
• Height	241 mm	310 mm	337 mm	380 mm
Mounting cutout (W x H x D)				
• Width	310 mm	396 mm	465 mm	542 mm
• Height	221 mm	291 mm	319 mm	362 mm
• Depth	82 mm	75 mm	75 mm	75 mm
Weight				
Weight without packaging	3.4 kg	5.2 kg	6.5 kg	7.1 kg
Weight incl. packaging	4.1 kg	5.7 kg	7.1 kg	7.8 kg

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Ordering data

Order No.

Industrial Thin Client

- SIMATIC ITC1200
12" Touch device
- SIMATIC ITC1500
15" Touch device
- SIMATIC ITC1900
19" Touch device
- SIMATIC ITC2200
22" Touch device

6AV6646-1AA22-0AX0

6AV6646-1AB22-0AX0

6AV6646-1AC22-0AX0

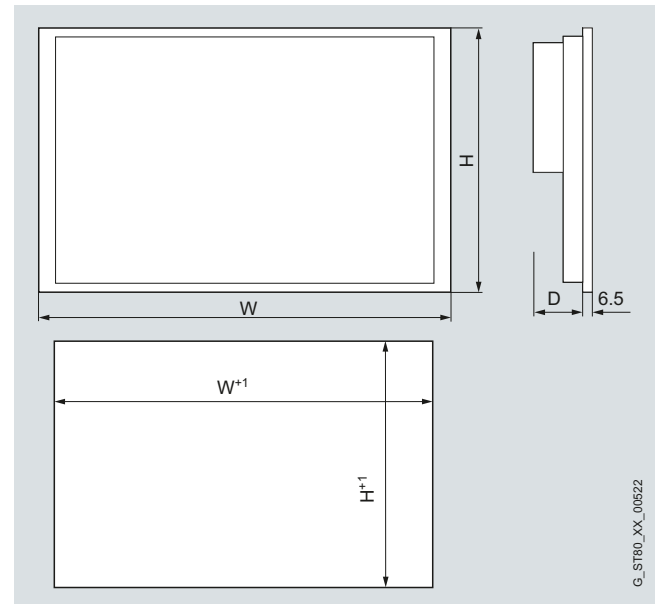
6AV6646-1AD22-0AX0

Accessories

See HMI accessories,
from page 2/96

Dimensional drawings

All dimensions in mm. For mounting cut-out see technical specifications.



Mounting dimensions

Industrial Thin Client	Faceplate Dimensions, in mm		Mounting Cutout, in mm		
	W	H	W+1	H+1	D
ITC1200	330	241	310	221	82
ITC1500	415	310	396	291	75
ITC1900	483	337	465	319	75
ITC2200	560	380	542	362	75

More information

Additional information is available on the Internet at:

<http://www.siemens.com/simatic-itc>