

Operator panels

Mobile Panels - 170 series

SIMATIC Mobile Panel 177

Overview



Technical specifications

SIMATIC Mobile Panel 177 PN (PROFINET)	6AV6 645-0AA01-0AX0 with integral acknowledgment button	6AV6 645-0AB01-0AX0 with integral acknowledgment button and STOP button	6AV6 645-0AC01-0AX0 with integral acknowledgment button, STOP button, handwheel, keyswitch and illuminated pushbutton
Display			
Size	5.7" (121 mm x 92 mm)	5.7" (121 mm x 92 mm)	5.7" (121 mm x 92 mm)
Display type	STN, 256 colors	STN, 256 colors	STN, 256 colors
Resolution (pixels)			
• Resolution (WxH in pixel)	320 x 240	320 x 240	320 x 240
Backlighting			
• MTBF backlighting (at 25 °C)	about 50,000 hours	about 50,000 hours	about 50,000 hours
Control elements			
Operating options	Keys and Touch	Keys and Touch	Keys and Touch
Function keys, programmable	14 function keys, 8 with LEDs	14 function keys, 8 with LEDs	14 function keys, 8 with LEDs
Keyboard fonts			
• System keys	0	0	0
Touch operation			
• Touch screen	Analog, resistive	Analog, resistive	Analog, resistive
Special operator controls			
• Illuminated pushbutton	No	No	Yes
• Handwheel	No	No	Yes
Supply voltage			
Supply voltage	via connection box	via connection box	via connection box
Backup battery			
Battery operation	maximum buffer time 10 min	maximum buffer time 10 min	maximum buffer time 10 min
Processor			
Processor	RISC 32-bit, 200 MHz	RISC 32-bit, 200 MHz	RISC 32-bit, 200 MHz
Memory			
Type	Flash / RAM	Flash / RAM	Flash / RAM
Usable memory for user data	2048 KB of usable memory for user data / no user memory for options	2048 KB of usable memory for user data / no user memory for options	2048 KB of usable memory for user data / no user memory for options
Interfaces			
Interfaces	1 x RS422, 1 x RS485 (max. 12 Mbit/s)	1 x RS422, 1 x RS485 (max. 12 Mbit/s)	1 x RS422, 1 x RS485 (max. 12 Mbit/s)
USB port	No	No	No
PC card slot	No	No	No
CF card slot	No	No	No
Multimedia card/SD card slot	combined	combined	combined
Industrial Ethernet			
• Industrial Ethernet interface	No	No	No

Technical specifications (continued)

SIMATIC Mobile Panel 177 PN (PROFINET)	6AV6 645-0AA01-0AX0 with integral acknowledgment button	6AV6 645-0AB01-0AX0 with integral acknowledgment button and STOP button	6AV6 645-0AC01-0AX0 with integral acknowledgment button, STOP button, handwheel, keyswitch and illuminated pushbutton
Degree and class of protection			
IP65 enclosure	Yes	Yes	Yes
Standards, approvals, certificates			
Certifications	CE, cULus, C-TICK, SIBE	CE, cULus, C-TICK, SIBE	CE, cULus, C-TICK, SIBE
Performance level acc. to EN ISO 13849-1	d	d	d
Safety category according to EN954-1	Safety category according to EN954-1 (acknowledgment button, STOP button if present) 3	Safety category according to EN954-1 (acknowledgment button, STOP button if present) 3	Safety category according to EN954-1 (acknowledgment button, STOP button if present) 3
Ambient conditions			
Drop height	1.5 m	1.5 m	1.5 m
Operating temperature			
• Operation	0 °C to +40 °C	0 °C to +40 °C	0 °C to +40 °C
Storage/transport temperature			
• Transport, storage	-20 °C to +60 °C	-20 °C to +60 °C	-20 °C to +60 °C
Relative humidity			
• max. relative humidity	80 %	80 %	80 %
Operating systems			
Operating system	Windows CE	Windows CE	Windows CE
Languages			
Online languages			
• Number of online/runtime languages	5	5	5
Functionality under WinCC flexible			
Libraries	Yes	Yes	Yes
Task planner	Yes	Yes	Yes
With alarm logging system (incl. buffer and acknowledgment)			
• Number of messages	2 000	2 000	2 000
• Bit messages	Yes	Yes	Yes
• Analog messages	Yes	Yes	Yes
Recipes			
• Number of recipes	100	100	100
• Data records per recipe	200	200	200
• Entries per data record	200	200	200
• Recipe memory	32 KB integrated Flash, expandable	32 KB integrated Flash, expandable	32 KB integrated Flash, expandable
Variables			
• Number of variables per device	1 024	1 024	1 024
• Limit values	Yes	Yes	Yes
• Multiplexing	Yes	Yes	Yes
Images			
• Number of configurable images	500	500	500
Image objects			
• Text objects	2,500 text elements	2,500 text elements	2,500 text elements
• Graphics object	Bit maps, vector graphics	Bit maps, vector graphics	Bit maps, vector graphics
Complex image objects			
• Status/control	With SIMATIC S7	With SIMATIC S7	With SIMATIC S7
• dynamic objects	Diagrams, bar graphs, sliders, invisible buttons	Diagrams, bar graphs, sliders, invisible buttons	Diagrams, bar graphs, sliders, invisible buttons
Lists			
• Number of text lists per project	300	300	300
• Number of graphics lists per project	100	100	100

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Technical specifications (continued)

SIMATIC Mobile Panel 177 PN (PROFINET)	6AV6 645-0AA01-0AX0 with integral acknowledgment button	6AV6 645-0AB01-0AX0 with integral acknowledgment button and STOP button	6AV6 645-0AC01-0AX0 with integral acknowledgment button, STOP button, handwheel, keyswitch and illuminated pushbutton
Security			
• Number of user groups	50	50	50
• Number of user rights	32	32	32
• Password export/import	Yes	Yes	Yes
Data carrier support			
• PC card	No	No	No
• CF card	No	No	No
Logging through printer			
• Recording/Printing	-	-	-
Transfer (upload/download)			
• Transfer of configuration	MPI/PROFIBUS DP, serial, automatic transfer recognition	MPI/PROFIBUS DP, serial, automatic transfer recognition	MPI/PROFIBUS DP, serial, automatic transfer recognition
Process coupling			
• Connection to controller	S5, S7-200, S7- 300/400, TI 505, Win AC, SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces"	S5, S7-200, S7- 300/400, TI 505, Win AC, SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces"	S5, S7-200, S7- 300/400, TI 505, Win AC, SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces"
Expandability/openness			
• Open Platform Program	Yes	Yes	Yes
I/O			
I/O devices			
• Multi Media Card	Yes	Yes	Yes
Mechanics/material			
Type of housing (front)	Plastic	Plastic	Plastic
Dimensions			
Housing diameter/depth (mm)	Dia 245 mm / D 58 mm	Dia 245 mm / D 58 mm	Dia 245 mm / D 58 mm
Weight			
Weight	1.3 kg	1.3 kg	1.3 kg
SIMATIC Mobile Panel 177 DP (MPI/PROFIBUS)	6AV6 645-0BA01-0AX0 with integral acknowledgment button	6AV6 645-0BB01-0AX0 with integral acknowledgment button and STOP button	6AV6 645-0BC01-0AX0 with integral acknowledgment button, STOP button, handwheel, keyswitch and illuminated pushbutton
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Control elements			
Operating options	Keys and Touch	Keys and Touch	Keys and Touch
Function keys, programmable	14 function keys, 8 with LEDs	14 function keys, 8 with LEDs	14 function keys, 8 with LEDs
Keyboard fonts			
• System keys	0	0	0
Touch operation			
• Touch screen	Analog, resistive	Analog, resistive	Analog, resistive
Special operator controls			
• Illuminated pushbutton	No	No	Yes
• Handwheel	No	No	Yes
Supply voltage			
Supply voltage	via connection box	via connection box	via connection box
Backup battery			
Battery operation	maximum buffer time 10 min	maximum buffer time 10 min	maximum buffer time 10 min

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SIMATIC Mobile Panel 177

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Ordering data	Order No.	Order No.	
SIMATIC Mobile Panel 177 DP (MPI/PROFIBUS) ¹⁾ • With integrated acknowl- edgement button • With integrated acknowl- edgement button and STOP pushbutton • With integrated acknowledgement button, STOP button, handwheel, key-operated switch and illuminated pushbutton	6AV6 645-0AA01-0AX0 6AV6 645-0AB01-0AX0 6AV6 645-0AC01-0AX0	SIMATIC HMI Manual Collection Electronic documentation, on DVD 5 languages (English, French, German, Italian and Spanish); contains: all currently available user manuals, manuals and communication manuals for SIMATIC HMI	6AV6 691-1SA01-0AX0
SIMATIC Mobile Panel 177 PN (PROFINET) ¹⁾ • With integrated acknowl- edgement button • With integrated acknowl- edgement button and STOP pushbutton • With integrated acknowl- edgement button, STOP button, handwheel, key-operated switch and illuminated pushbutton	6AV6 645-0BA01-0AX0 6AV6 645-0BB01-0AX0 6AV6 645-0BC01-0AX0	System components for Mobile Panels	
		DP junction box for Mobile Panels (MPI/PROFIBUS) • Basic • Plus	6AV6 671-5AE00-0AX0 6AV6 671-5AE10-0AX0
		PN connection box for Mobile Panel (PROFINET) • Basic • Plus	6AV6 671-5AE01-0AX0 6AV6 671-5AE11-0AX0
		Connecting cable and acces- sories for Mobile Panels	See HMI accessories
Configuration with SIMATIC WinCC flexible			
Documentation (to be ordered separately)			
Operating Instructions for Mobile Panel 177 • German • English • French • Italian • Spanish	6AV6 691-1DK01-0AA0 6AV6 691-1DK01-0AB0 6AV6 691-1DK01-0AC0 6AV6 691-1DK01-0AD0 6AV6 691-1DK01-0AE0		
User Manual WinCC flexible Compact/Standard/Advanced • German • English • French • Italian • Spanish	6AV6 691-1AB01-3AA0 6AV6 691-1AB01-3AB0 6AV6 691-1AB01-3AC0 6AV6 691-1AB01-3AD0 6AV6 691-1AB01-3AE0		
WinCC flexible Communication User Manual • German • English • French • Italian • Spanish	6AV6 691-1CA01-3AA0 6AV6 691-1CA01-3AB0 6AV6 691-1CA01-3AC0 6AV6 691-1CA01-3AD0 6AV6 691-1CA01-3AE0		

1)

The system components (connecting cables and connection boxes) must be ordered separately.

2)

Delivery time approximately 6 weeks

¹⁾ The system components (connecting cables and connection boxes) must be ordered separately.

²⁾ Delivery time approximately 6 weeks