

Operator panels

Advanced HMI – Panel-based

Mobile Panels

Mobile Panels

Overview

SIMATIC Mobile Panels

Mobile Panels 2nd Generation

The second generation of SIMATIC HMI Mobile Panels impresses with its convenience, performance and quality.

The highlights: A brilliant widescreen display, particularly simple configuration and the unique illuminated emergency stop button.

This series of devices offers panels with 4", 7" and 9" displays, each of which is available with or without safety-related operator controls.

The Mobile Panels of the 2nd Generation are the successors to the SIMATIC HMI Mobile Panels x77 with cable connections.

- **SIMATIC HMI KTP400F Mobile**
- **SIMATIC HMI KTP700 Mobile**
- **SIMATIC HMI KTP700F Mobile**
- **SIMATIC HMI KTP900 Mobile**
- **SIMATIC HMI KTP900F Mobile**

SIMATIC Mobile Panels x77 Series

SIMATIC Mobile Panel 277(F) IWLAN

The SIMATIC Mobile Panels 277(F) IWLAN with 8" displays feature wireless communications and offer optional safety engineering.

The highlights:

- Complete freedom in mobile HMI by means of Industrial Wireless LAN (IWLAN) as specified in IEEE 802.11 (a/b/g/h)
- Integrated security according to SIL 3 or PLe in interaction with the SIMATIC fail-safe controllers
- Powerful batteries and flexible concept for changing permit battery replacement "on the fly" without interrupting operation

The following devices are available:

- **SIMATIC Mobile Panel 277 IWLAN V2 without operator controls**
- **SIMATIC Mobile Panel 277 IWLAN V2 with operator controls**
- **SIMATIC Mobile Panel 277F IWLAN V2 without operator controls**
- **SIMATIC Mobile Panel 277F IWLAN V2 with operator controls**
- **SIMATIC Mobile Panel 277F IWLAN RF with operator controls**

Overview

Mobile Panels 2nd Generation

- SIMATIC HMI KTP400F Mobile
- SIMATIC HMI KTP700 Mobile
- SIMATIC HMI KTP700F Mobile
- SIMATIC HMI KTP900 Mobile
- SIMATIC HMI KTP900F Mobile

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Technical specifications

Article number	6AV2125-2DB23-0AX0	6AV2125-2GB03-0AX0	6AV2125-2GB23-0AX0	6AV2125-2JB03-0AX0	6AV2125-2JB23-0AX0
	SIMATIC HMI KTP400F MOBILE	SIMATIC HMI KTP700 MOBILE	SIMATIC HMI KTP700F MOBILE	SIMATIC HMI KTP900 MOBILE	SIMATIC HMI KTP900F MOBILE
General information					
Product type designation	SIMATIC HMI KTP400F Mobile	SIMATIC HMI KTP700 Mobile	SIMATIC HMI KTP700F Mobile	SIMATIC HMI KTP900 Mobile	SIMATIC HMI KTP900F Mobile
Display					
Design of display	TFT	TFT widescreen display, LED backlighting	TFT widescreen display, LED backlighting	TFT widescreen display, LED backlighting	TFT widescreen display, LED backlighting
Screen diagonal	4.3 in	7 in	7 in	9 in	9 in
Number of colors	16 777 216	16 777 216	16 777 216	16 777 216	16 777 216
Resolution (pixels)					
• Horizontal image resolution	480 Pixel	800 Pixel	800 Pixel	800 Pixel	800 Pixel
• Vertical image resolution	272 Pixel	480 Pixel	480 Pixel	480 Pixel	480 Pixel
Backlighting					
• MTBF backlighting (at 25 °C)	50 000 h	50 000 h	50 000 h	50 000 h	50 000 h
• Backlight dimmable	Yes; 0-100 %	Yes; 0-100 %	Yes; 0-100 %	Yes; 0-100 %	Yes; 0-100 %
Operator controls					
Keyboard fonts					
• Function keys					
- Number of function keys	4	8	8	10	10
• Numeric/alphabetical input					
- Numeric keyboard	Yes; Onscreen keyboard	Yes; Onscreen keyboard	Yes; Onscreen keyboard	Yes; Onscreen keyboard	Yes; Onscreen keyboard
- alphanumeric keyboard	Yes; Onscreen keyboard	Yes; Onscreen keyboard	Yes; Onscreen keyboard	Yes; Onscreen keyboard	Yes; Onscreen keyboard
Touch operation					
• Design as touch screen	Yes	Yes	Yes	Yes	Yes
• Design as multi-touch screen	No	No	No	No	No
Special operator controls					
• Stop button (forced blocking)	Yes	No	Yes	No	Yes
• Emergency stop button (forced blocking)	No	No	No	No	No
• Emergency stop button (illuminated and forced blocking)	Yes	No	Yes	No	Yes
• Acknowledgement button (3-stage)	Yes	No	Yes	No	Yes
• Key-operated switch	No	No	Yes	No	Yes
• Illuminated pushbutton	Yes	Yes	Yes	Yes	Yes

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Camera					
• integrated camera	No	No	No	No	No
Expansions for operator control of the process					
• DP direct LEDs (LEDs as S7 output I/O)					
- F1...Fx	4	8	8	10	10
• Direct keys (keys as S7 input I/O)					
- F1...Fx	4	8	8	10	10
• Direct keys (touch buttons as S7 input I/O)	32	32	32	32	32
Supply voltage					
Type of supply voltage	DC	DC	DC	DC	DC
Rated value (DC)	24 V	24 V	24 V	24 V	24 V
permissible range, lower limit (DC)	19.2 V	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	28.8 V
Input current					
Current consumption (rated value)	210 mA	350 mA	350 mA	450 mA	450 mA
Starting current inrush I _{st}	0.37 A ² ·s	0.135 A ² ·s	0.135 A ² ·s	0.135 A ² ·s	0.135 A ² ·s
Power					
Active power input, typ.	5 W	8.5 W	8.5 W	11 W	11 W
Processor					
Processor type	ARM	ARM	ARM	ARM	ARM
Memory					
Flash	Yes	Yes	Yes	Yes	Yes
RAM	Yes	Yes	Yes	Yes	Yes
Memory available for user data	4 Mbyte	12 Mbyte	12 Mbyte	12 Mbyte	12 Mbyte
Type of output					
Power LED	No	No	No	No	No
LED for safe	No	No	No	No	No
LED for communication	No	No	No	No	No
LED for battery	No	No	No	No	No
Vibrations	No	No	No	No	No
Time of day					
Clock					
• Hardware clock (real-time)	Yes	Yes	Yes	Yes	Yes
• Software clock	No	No	No	No	No
• retentive	Yes	Yes	Yes	Yes	Yes
• synchronizable	Yes	Yes	Yes	Yes	Yes
Interfaces					
Number of industrial Ethernet interfaces	1	1	1	1	1
Number of PROFINET interfaces	1	1	1	1	1
Number of RS 485 interfaces	0	0	0	0	0
Number of RS 422 interfaces	0	0	0	0	0
Number of RS 232 interfaces	0	0	0	0	0
Number of USB interfaces	1; USB 2.0	1; USB 2.0	1; USB 2.0	1; USB 2.0	1; USB 2.0
Number of 20 mA interfaces (TTY)	0	0	0	0	0
Number of parallel interfaces	0	0	0	0	0
Number of other interfaces	0	0	0	0	0
Number of wireless interfaces	0	0	0	0	0
Number of SD card slots	0	1	1	1	1
With software interfaces	No	No	No	No	No

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Protocols					
PROFINET	Yes	Yes	Yes	Yes	Yes
PROFIsafe	Yes	No	Yes	No	Yes
PROFIBUS	No	No	No	No	No
MPI	No	No	No	No	No
Protocols (Ethernet)					
• TCP/IP	Yes	Yes	Yes	Yes	Yes
• DHCP	Yes	Yes	Yes	Yes	Yes
• SNMP	Yes	Yes	Yes	Yes	Yes
• DCP	Yes	Yes	Yes	Yes	Yes
• LLDP	Yes	Yes	Yes	Yes	Yes
WEB characteristics					
• HTTP	Yes	Yes	Yes	Yes	Yes
• HTTPS	Yes	Yes	Yes	Yes	Yes
• HTML	Yes	Yes	Yes	Yes	Yes
• XML	No	No	No	No	No
• CSS	Yes	Yes	Yes	Yes	Yes
• Active X	No	No	No	No	No
• JavaScript	Yes	Yes	Yes	Yes	Yes
• Java VM	No	No	No	No	No
Further protocols					
• EtherNet/IP	Yes	Yes	Yes	Yes	Yes
• MODBUS	Yes	Yes	Yes	Yes	Yes
• other bus systems	No	No	No	No	No
Communication functions					
Wireless communication					
• supported standards					
- Radio standard WLAN 802.11	No	No	No	No	No
- Bluetooth radio standard	No	No	No	No	No
Interrupts/diagnostics/ status information					
Diagnostic messages					
• Diagnostic information readable	Yes	Yes	Yes	Yes	Yes
EMC					
Emission of radio interference acc. to EN 55 011					
• Limit class A, for use in industrial areas	Yes	Yes	Yes	Yes	Yes
• Limit class B, for use in residential areas	No	No	No	No	No
Degree and class of protection					
IP65 (all-round)	Yes	Yes	Yes	Yes	Yes
Standards, approvals, certificates					
CE mark	Yes	Yes	Yes	Yes	Yes
cULus	Yes	Yes	Yes	Yes	Yes
RCM (formerly C-TICK)	Yes	Yes	Yes	Yes	Yes
KC approval	No; Available soon	No; Available soon	No; Available soon	No; Available soon	No; Available soon
Suitable for safety functions	Yes	No	Yes	No	Yes
Marine approval					
• Germanischer Lloyd (GL)	No; Available soon	No; Available soon	No; Available soon	No; Available soon	No; Available soon
• American Bureau of Shipping (ABS)	Yes	Yes	Yes	Yes	Yes
• Bureau Veritas (BV)	No; Available soon	No; Available soon	No; Available soon	No; Available soon	No; Available soon
• Det Norske Veritas (DNV)	No; Available soon	No; Available soon	No; Available soon	No; Available soon	No; Available soon
• Korean Register of Shipping (KRS)	No	No	No	No	No
• Lloyds Register of Shipping (LRS)	No; Available soon	Yes	No; Available soon	Yes	No; Available soon
• Nippon Kaiji Kyokai (Class NK)	No; Available soon	No; Available soon	No; Available soon	No; Available soon	No; Available soon
• Polski Rejestr Statkow (PRS)	No	No	No	No	No
• Chinese Classification Society (CCS)	No	No	No	No	No

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Highest safety class achievable in safety mode					
• Performance level according to ISO 13849-1	PLe	none	PLe	none	PLe
• SIL acc. to IEC 61508	SIL 3	No	SIL 3	No	SIL 3
Use in hazardous areas					
• ATEX Zone 2	No	No	No	No	No
• ATEX Zone 22	No	No	No	No	No
• IECEx Zone 2	No	No	No	No	No
• IECEx Zone 22	No	No	No	No	No
• cULus Class I Zone 1	No	No	No	No	No
• cULus Class I Zone 2, Division 2	No	No	No	No	No
• FM Class I Division 2	No	No	No	No	No
Ambient conditions					
Free fall					
• Fall height, max.	1.2 m	1.2 m	1.2 m	1.2 m	1.2 m
Ambient temperature during operation					
• min.	0 °C	0 °C	0 °C	0 °C	0 °C
• max.	45 °C	45 °C	45 °C	45 °C	45 °C
Ambient temperature during storage/transportation					
• min.	-20 °C	-20 °C	-20 °C	-20 °C	-20 °C
• max.	60 °C	60 °C	60 °C	60 °C	60 °C
Relative humidity					
• Operation, max.	90 %	90 %	90 %	90 %	90 %
Operating systems					
pre-installed operating system					
• Windows CE	Yes	Yes	Yes	Yes	Yes
Configuration					
Message indicator	Yes	Yes	Yes	Yes	Yes
Alarm system (incl. buffer and acknowledgment)	Yes	Yes	Yes	Yes	Yes
Process value display (output)	Yes	Yes	Yes	Yes	Yes
Process value default (input) possible	Yes	Yes	Yes	Yes	Yes
Recipe management	Yes	Yes	Yes	Yes	Yes
Configuration software					
• STEP 7 Basic (TIA Portal)	No	No	No	No	No
• STEP 7 Professional (TIA Portal)	No	No	No	No	No
• WinCC flexible Compact	No	No	No	No	No
• WinCC flexible Standard	No	No	No	No	No
• WinCC flexible Advanced	No	No	No	No	No
• WinCC Basic (TIA Portal)	No	No	No	No	No
• WinCC Comfort (TIA Portal)	Yes	Yes	Yes	Yes	Yes
• WinCC Advanced (TIA Portal)	Yes	Yes	Yes	Yes	Yes
• WinCC Professional (TIA Portal)	Yes	Yes	Yes	Yes	Yes
Languages					
Online languages					
• Number of online/runtime languages	32	32	32	32	32
Project languages					
• Languages per project	32	32	32	32	32

Technical specifications (continued)

Article number	6AV2125-2DB23-0AX0 SIMATIC HMI KTP400F MOBILE	6AV2125-2GB03-0AX0 SIMATIC HMI KTP700 MOBILE	6AV2125-2GB23-0AX0 SIMATIC HMI KTP700F MOBILE	6AV2125-2JB03-0AX0 SIMATIC HMI KTP900 MOBILE	6AV2125-2JB23-0AX0 SIMATIC HMI KTP900F MOBILE
Functionality under WinCC (TIA Portal)					
Libraries	Yes	Yes	Yes	Yes	Yes
Applications/options					
• Web browser	Yes	Yes	Yes	Yes	Yes
• Pocket Word	No	No	No	No	No
• Pocket Excel	No	No	No	No	No
• PDF Viewer	Yes	Yes	Yes	Yes	Yes
• Media Player	No	No	No	No	No
• SIMATIC WinCC Sm@rtServer	Yes	Yes	Yes	Yes	Yes
• SIMATIC WinCC Audit	Yes	Yes	Yes	Yes	Yes
Number of Visual Basic Scripts	Yes	Yes	Yes	Yes	Yes
Task planner					
• time-controlled	Yes	Yes	Yes	Yes	Yes
• task-controlled	Yes	Yes	Yes	Yes	Yes
Help system					
• Number of characters per info text	500	500	500	500	500
Multiproject					
• Number of projects (internal)	0	0	0	0	0
• Number of projects (external)	0	0	0	0	0
Message system					
• Number of alarm classes	32	32	32	32	32
• Bit messages					
- Number of bit messages	4 000	4 000	4 000	4 000	4 000
• Analog messages					
- Number of analog messages	200	200	200	200	200
• S7 alarm number procedure	Yes	Yes	Yes	Yes	Yes
• System messages HMI	Yes	Yes	Yes	Yes	Yes
• System messages, other (SIMATIC S7, SINUMERIK, SIMOTION, etc.)	Yes	Yes	Yes	Yes	Yes
• Number of characters per message	80	80	80	80	80
• Number of process values per message	8	8	8	8	8
• Acknowledgment groups	Yes	Yes	Yes	Yes	Yes
• Message indicator	Yes	Yes	Yes	Yes	Yes
• Message buffer					
- Number of entries	1 024	1 024	1 024	1 024	1 024
- Circulating buffer	Yes	Yes	Yes	Yes	Yes
- retentive	Yes	Yes	Yes	Yes	Yes
- maintenance-free	Yes	Yes	Yes	Yes	Yes
Recipe management					
• Number of recipes	300	300	300	300	300
• Data records per recipe	500	500	500	500	500
• Entries per data record	1 000	1 000	1 000	1 000	1 000
• Size of internal recipe memory	2 Mbyte	2 Mbyte	2 Mbyte	2 Mbyte	2 Mbyte
• Recipe memory expandable	Yes	Yes	Yes	Yes	Yes
Variables					
• Number of variables per device	2 048	2 048	2 048	2 048	2 048
• Number of variables per screen	50	400	400	400	400
Lists					
• Number of text lists per project	500	500	500	500	500
• Number of entries per text list	500	500	500	500	500
• Number of graphics lists per project	500	500	500	500	500
• Number of entries per graphics list	500	500	500	500	500

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Archiving					
• Number of archives per device	50	50	50	50	50
• Number of entries per archive	20 000	20 000	20 000	20 000	20 000
Process coupling					
• S7-1200	Yes	Yes	Yes	Yes	Yes
• S7-1500	Yes	Yes	Yes	Yes	Yes
• S7-200	Yes	Yes	Yes	Yes	Yes
• S7-300/400	Yes	Yes	Yes	Yes	Yes
• LOGO!	Yes	Yes	Yes	Yes	Yes
• WinAC	Yes; WinAC RTX	Yes; WinAC RTX	Yes; WinAC RTX	Yes; WinAC RTX	Yes; WinAC RTX
• SINUMERIK	Yes; without NC channel	Yes	Yes; without NC channel	Yes	Yes; without NC channel
• SIMOTION	Yes	Yes	Yes	Yes	Yes
Service tools/configuration aids					
• Backup/Restore manually	Yes	Yes	Yes	Yes	Yes
• Backup/Restore automatically	No	Yes	Yes	Yes	Yes
• Simulation	Yes	Yes	Yes	Yes	Yes
• Device switchover	Yes	Yes	Yes	Yes	Yes
Peripherals/Options					
Peripherals					
• Printer	Yes	Yes	Yes	Yes	Yes
Dimensions					
Width of the housing front	194 mm	248.4 mm	248.4 mm	307.5 mm	307.5 mm
Height of housing front	166 mm	171.7 mm	194.9 mm	200.9 mm	223.5 mm
Weights					
Weight without packaging	0.7 kg	1.2 kg	1.3 kg	1.5 kg	1.6 kg
Weight incl. packaging	0.95 kg	1.3 kg	1.4 kg	1.6 kg	1.7 kg

Ordering data

Article No.

Article No.

SIMATIC Mobile Panels for 2nd Generation ¹⁾

KTP400F Mobile	6AV2125-2DB23-0AX0
KTP700 Mobile	6AV2125-2GB03-0AX0
KTP700F Mobile	6AV2125-2GB23-0AX0
KTP900 Mobile	6AV2125-2JB03-0AX0
KTP900F Mobile	6AV2125-2JB23-0AX0

Starter kit Mobile Panel

Consisting of:
1x KTP700F Mobile,
1x connection box standard,
1x connecting cable 2 m,
1x wall bracket,
1x WinCC Comfort (TIA Portal)

6AV2133-5GA00-0AA0

Accessories

Connecting cable and accessories for Mobile Panels

See "Operator Control and
Monitoring Systems SIMATIC HMI"
-> "Accessories"

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

More information

More information is available on the Internet at:

<http://www.siemens.com/mobile-panels>

Note:

Do you need a specific modification or option for the products described here? Then look up "Customized products", where you will find information about additional sector-specific products that can be ordered as well as about options for customer-specific modification and adaptation.