## **SIEMENS**

## Data sheet

## 6AV2145-6KB10-0AS0

SIMATIC HMI TP1000F MOBILE RO 10.0" TFT display, 1280x800 pixels, 16 million colors, Touch operation, touch pen, 1x PROFINET/Industrial Ethernet interface, 1x multimedia card, 1x USB, no key-operated switch, acknowledgement button, 1 emergency stop/stop button with Remote Operate



Figure similar

General information	
Product type designation	TP1000F Mobile RO
Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	10.1 in
Color display	Yes
Number of colors	16 777 216
Resolution (pixels)	
<ul> <li>Horizontal image resolution</li> </ul>	1 280 Pixel
<ul> <li>Vertical image resolution</li> </ul>	800 Pixel
Backlighting	
MTBF backlighting (at 25 °C)	50 000 h
Backlight dimmable	Yes; 0-100 %
Control elements	
Keyboard fonts	
Function keys	

	0
— Number of function keys	0
<ul> <li>Number of function keys with LEDs</li> </ul>	0
Keys with LED	No
Numeric keyboard	Yes; Onscreen keyboard
alphanumeric keyboard	Yes; Onscreen keyboard
Touch operation	
<ul> <li>Design as touch screen</li> </ul>	Yes
<ul> <li>Design as multi-touch screen</li> </ul>	No
Special operator controls	
<ul> <li>Stop button (forced blocking)</li> </ul>	Yes
<ul> <li>Emergency stop button (illuminated and forced blocking)</li> </ul>	Yes
<ul> <li>Acknowledgement button (3-stage)</li> </ul>	Yes
Key-operated switch	No
Illuminated pushbutton	No
Handwheel	No
Camera	
integrated camera	No
Expansions for operator control of the process	
DP direct LEDs (LEDs as S7 output I/O)	
— F1Fx	0
<ul> <li>Direct keys (keys as S7 input I/O)</li> </ul>	
— F1Fx	0
<ul> <li>Direct keys (touch buttons as S7 input I/O)</li> </ul>	0
Supply voltage	
Type of supply voltage	DC
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption (rated value)	450 mA
Starting current inrush I²t	0.2 A <sup>2</sup> ·s
Power	
Active power input, typ.	11 W
Processor	
Processor type	ARM
Memory	
Flash	Yes
RAM	Yes
Memory available for user data	12 Mbyte

Type of output	
Power LED	No
LED for safe	No
LED for communication	No
LED for battery	No
Vibrations	No
Time of day	
Clock	
Hardware clock (real-time)	Yes
• retentive	Yes
• synchronizable	Yes
Interfaces	4
Number of industrial Ethernet interfaces	1
Number of PROFINET interfaces	1
Number of RS 485 interfaces	0
Number of RS 422 interfaces	0
Number of RS 232 interfaces	0
Number of USB interfaces	1; USB 2.0
Number of 20 mA interfaces (TTY)	0
Number of parallel interfaces	0
Number of other interfaces	0
Number of wireless interfaces	0
Number of SD card slots	1
With software interfaces	No
Protocols	
PROFINET	No
Supports protocol for PROFINET IO	No
PROFIsafe	No
PROFIBUS	No
MPI	No
Protocols (Ethernet)	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
WEB characteristics	
• HTTP	Yes
• HTTPS	Yes
• HTML	Yes
	No
• XML	110

• CSS	Yes
<ul><li>Active X</li></ul>	No
JavaScript	Yes
• Java VM	No
Further protocols	
EtherNet/IP	Yes
• MODBUS	Yes
• other bus systems	No
Communication functions	
Wireless communication	
supported standards	
— Radio standard WLAN 802.11	No
<ul> <li>Bluetooth radio standard</li> </ul>	No
Interrupts/diagnostics/status information	
Diagnostic messages	
Diagnostic information readable	Yes
EMC	
Emission of radio interference acc. to EN 55 011	
Limit class A, for use in industrial areas	Yes
Limit class B, for use in residential areas	No
Littill Class D, 101 use in residential areas	140
Degree and class of protection	
Degree and class of protection IP65 (all-round)	Yes
	Yes
IP65 (all-round)	Yes
IP65 (all-round) Standards, approvals, certificates	
IP65 (all-round) Standards, approvals, certificates CE mark	Yes
IP65 (all-round)  Standards, approvals, certificates  CE mark  cULus	Yes Yes
IP65 (all-round)  Standards, approvals, certificates  CE mark  cULus  RCM (formerly C-TICK)	Yes Yes Yes
IP65 (all-round)  Standards, approvals, certificates  CE mark  cULus  RCM (formerly C-TICK)  KC approval	Yes Yes Yes No
IP65 (all-round)  Standards, approvals, certificates CE mark cULus RCM (formerly C-TICK) KC approval Suitable for safety functions	Yes Yes Yes No Yes
IP65 (all-round)  Standards, approvals, certificates  CE mark  cULus  RCM (formerly C-TICK)  KC approval  Suitable for safety functions  Marine approval	Yes Yes Yes No Yes
IP65 (all-round)  Standards, approvals, certificates  CE mark  cULus  RCM (formerly C-TICK)  KC approval  Suitable for safety functions  Marine approval  Highest safety class achievable in safety mode	Yes Yes Yes No Yes No
IP65 (all-round)  Standards, approvals, certificates CE mark cULus RCM (formerly C-TICK) KC approval Suitable for safety functions Marine approval Highest safety class achievable in safety mode  • Performance level according to ISO 13849-1	Yes Yes Yes No No Yes No
IP65 (all-round)  Standards, approvals, certificates  CE mark  cULus  RCM (formerly C-TICK)  KC approval  Suitable for safety functions  Marine approval  Highest safety class achievable in safety mode  • Performance level according to ISO 13849-1  • SIL acc. to IEC 61508	Yes Yes Yes No No Yes No
IP65 (all-round)  Standards, approvals, certificates CE mark cULus RCM (formerly C-TICK) KC approval Suitable for safety functions Marine approval Highest safety class achievable in safety mode  • Performance level according to ISO 13849-1 • SIL acc. to IEC 61508 Use in hazardous areas	Yes Yes Yes No Yes No PLe SIL 3
IP65 (all-round)  Standards, approvals, certificates  CE mark  cULus  RCM (formerly C-TICK)  KC approval  Suitable for safety functions  Marine approval  Highest safety class achievable in safety mode  • Performance level according to ISO 13849-1  • SIL acc. to IEC 61508  Use in hazardous areas  • ATEX Zone 2	Yes Yes Yes No No Yes No PLe SIL 3
IP65 (all-round)  Standards, approvals, certificates  CE mark  cULus  RCM (formerly C-TICK)  KC approval  Suitable for safety functions  Marine approval  Highest safety class achievable in safety mode  • Performance level according to ISO 13849-1  • SIL acc. to IEC 61508  Use in hazardous areas  • ATEX Zone 2  • ATEX Zone 22	Yes Yes Yes No Yes No Yes No PLe SIL 3
IP65 (all-round)  Standards, approvals, certificates  CE mark  cULus  RCM (formerly C-TICK)  KC approval  Suitable for safety functions  Marine approval  Highest safety class achievable in safety mode  • Performance level according to ISO 13849-1  • SIL acc. to IEC 61508  Use in hazardous areas  • ATEX Zone 2  • ATEX Zone 22  • IECEx Zone 2	Yes Yes Yes No No Yes No No PLe SIL 3
IP65 (all-round)  Standards, approvals, certificates  CE mark  cULus  RCM (formerly C-TICK)  KC approval  Suitable for safety functions  Marine approval  Highest safety class achievable in safety mode  • Performance level according to ISO 13849-1  • SIL acc. to IEC 61508  Use in hazardous areas  • ATEX Zone 2  • IECEx Zone 22  • IECEx Zone 22	Yes Yes Yes No Yes No Yes No
IP65 (all-round)  Standards, approvals, certificates  CE mark  cULus  RCM (formerly C-TICK)  KC approval  Suitable for safety functions  Marine approval  Highest safety class achievable in safety mode  • Performance level according to ISO 13849-1  • SIL acc. to IEC 61508  Use in hazardous areas  • ATEX Zone 2  • ATEX Zone 22  • IECEx Zone 22  • CULus Class I Zone 1	Yes Yes Yes No No Yes No

American Bureau of Shipping (ABS)	No No
· ····································	No
Bureau Veritas (BV)	140
	No
<ul> <li>Det Norske Veritas (DNV)</li> </ul>	No
Korean Register of Shipping (KRS)	No
Lloyds Register of Shipping (LRS)	No
	No
Polski Rejestr Statkow (PRS)	No
Chinese Classification Society (CCS)	No
Ambient conditions	
Free fall	
• Fall height, max.	1.2 m
Ambient temperature during operation	
• min.	0 °C
● max. 4	45 °C
Ambient temperature during storage/transportation	
● min	-20 °C
● max. 6	60 °C
Relative humidity	
• Operation, max.	90 %
Operating systems	
pre-installed operating system	
Windows CE	Yes
Languages	
Online languages	
<ul> <li>Number of online/runtime languages</li> </ul>	32
Functionality under WinCC (TIA Portal)	
Security	
3. 2.4	50
Service tools/configuration aids	
, , , , , , , , , , , , , , , , , , ,	Yes
Backup/Restore automatically	Yes
Peripherals/Options	
	Yes
·	Yes
SIMATIC HMI SD memory card: Secure Digital Memory card	Yes
USB memory	Yes
Additional software components loadable	Yes; SIMATIC options

Mechanics/material	
Enclosure material (front)	
• Plastic	Yes
Aluminum	No
• Stainless steel	No
Dimensions	
Width of the housing front	307.5 mm
Height of housing front	223.5 mm
Weights	
Weight (without packaging)	1.6 kg
Weight incl. packaging	1.7 kg
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