SIEMENS

Data sheet

6AV7880-0HB12-2DA2

SIMATIC ITP1000, 8 function keys, Ethernet 10/100/1000 Mbit/s, 1x RS232, 2x USB 3.0, 1x UAJ, 1x USB type-C, 1x SD card reader, Wifi 802.11 a/b/c/g, Bluetooth, Lithium-ion battery; 10" Multitouch (1280 x 800); Camera, RFID and barcode reader; 512 GB SSD; Windows 7 Ultimate 64 bit SP1, MUI (de, en, fr, es, it); Core I5-6442EQ; 16 GB RAM; 110/230 V AC power supply unit, Power supply cable for USA; without software (included);

General information	
Design of the programming device	Tablet PC
Display	
Design of display	10" multi-touch
Resolution (pixels)	
 Horizontal image resolution 	1 280 pixel; 1 920 pixels
 Vertical image resolution 	800 pixel; 1 200 pixels
General features	
Luminance	220 cd/m²; 350 cd/m²
Backlighting	
 Type of backlighting 	LED
Control elements	
Keyboard fonts	
Design	Touch
Touch operation	
 Integrated touch pad 	No
Supply voltage	
Design of the power supply	External wide-range power supply; 3-pole
permissible range, lower limit (AC)	100 V; ±10 %, sinusoidal
permissible range, upper limit (AC)	240 V; ±10 %, sinusoidal
Line frequency	
 permissible range, lower limit 	47 Hz
 permissible range, upper limit 	63 Hz
Processor	
Processor type	Celeron G3902 (2C/2T, 1.6 GHz, 2 MB cache); Intel Core i5-6442EQ (6 MB cache, up to 2.70 GHz, iAMT)
Hyper-threading	No
Turbo Boost Technology 2.0	Yes
Graphic	
Graphics controller	Intel® HD graphics 530
Drives	
SSD	Yes
Memory capacity	256 Gbyte; Up to 512 GB SSD
TPM Security Chip	Yes
Memory	
Type of memory	DDR4-SDRAM SO-DIMM
Work memory	
• integrated	4 Gbyte; 8 GB or 16 GB
Accumulator	
Replaceable	Yes; Lithium-ion battery
Capacity	5 900 mA·h
Battery runtime, min.	6 h; According to MobileMark 2014
Interfaces	
Number of industrial Ethernet interfaces	1
Number of RS 232 interfaces	1
Number of USB interfaces	3; USB 3.0
• Type A	2
• Type C	1
, , , , , , , , , , , , , , , , , , ,	

Bluetooth radio standard	Yes; V4.0
Multimedia card/SD card slot	2 in 1 (SDHC UHS-II, MMC)
Universal Audio Jack	Yes; Audio socket for 3.5 mm jack
Video interfaces	V - DD 40 (M) D: L D ()
DisplayPort Individual Ethograph	Yes; DP 1.2 (Mini DisplayPort)
Industrial Ethernet • Industrial Ethernet interface	1v Ethornot /D IAE\
— 100 Mbps	1x Ethernet (RJ45) Yes
— 100 Mbps	Yes
IAMT (Intel Active Management Technology)	Yes
WLAN	100
• Type	IEEE 802.11 a/b/g/n and ac
Wireless transmission	
Protocol for wireless transmission	Legic Prime, Legic Advant, ISO 15693, ISO 14443 A/B
 Operating frequency (rated value) 	13.56 MHz
• Range, max.	30 mm; Range depends on transponder
Interrupts/diagnostics/status information	
LED status display	Battery charge level, device status, access to drive, WLAN active, SD card,
EMC	application LED
Interference immunity against discharge of static electricity	
Interference immunity against discharge of static electricity Interference immunity against discharge of static	Yes; ±4 kV contact discharge (to IEC 801-2/IEC 1000-4-2; ESD), ±8 kV air
electricity acc. to IEC 61000-4-2	discharge (to IEC 801-2/IEC 1000-4-2; ESD)
Interference immunity to cable-borne interference	
Interference immunity on supply cables	±2 kV (according to IEC 61000-4-4, burst); ±1 kV (according to IEC 61000-4-5, surge pulse/line to line); ±2 kV (according to IEC 61000-4-5, surge pulse/line to ground)
• Interference immunity on signal cables	±1 kV (according to IEC 61000-4-4, burst, length < 30 m); ±2 kV (according to IEC 61000-4-4, burst, length > 30 m); ±2 kV (according to IEC 61000-4-5, surge sym./line to ground, length > 30 m)
Degree and class of protection	- Symmetric Greater, range.
IP degree of protection	IP40
Standards, approvals, certificates	
CE mark	Yes
CE mark UL approval	Yes Yes
UL approval	Yes
UL approval DIN/ISO 9001 Military use • Conforms to MIL-STD-810G	Yes
UL approval DIN/ISO 9001 Military use	Yes Yes
UL approval DIN/ISO 9001 Military use • Conforms to MIL-STD-810G	Yes Yes
UL approval DIN/ISO 9001 Military use • Conforms to MIL-STD-810G Ambient conditions	Yes Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation)
UL approval DIN/ISO 9001 Military use • Conforms to MIL-STD-810G Ambient conditions Ambient temperature during operation • min. • max.	Yes Yes Yes
UL approval DIN/ISO 9001 Military use	Yes Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation)
UL approval DIN/ISO 9001 Military use	Yes Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation)
UL approval DIN/ISO 9001 Military use	Yes Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation)
UL approval DIN/ISO 9001 Military use	Yes Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation)
UL approval DIN/ISO 9001 Military use	Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation) 5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14
UL approval DIN/ISO 9001 Military use	Yes Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation) 5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC
UL approval DIN/ISO 9001 Military use	Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation) 5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 85 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14
UL approval DIN/ISO 9001 Military use	Yes Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation) 5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 85 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC
UL approval DIN/ISO 9001 Military use	Yes Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation) 5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 85 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14
UL approval DIN/ISO 9001 Military use	Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation) 5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 85 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14
UL approval DIN/ISO 9001 Military use	Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation) 5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 85 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 Yes Yes
UL approval DIN/ISO 9001 Military use	Yes Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation) 5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 85 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14
UL approval DIN/ISO 9001 Military use	Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation) 5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 85 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 Yes Yes Multi-Language User Interface (MUI): 6 languages (English, German, French, Spanish, Italian, Chinese)
UL approval DIN/ISO 9001 Military use	Yes Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation) 5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 85 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 Yes Yes Multi-Language User Interface (MUI): 6 languages (English, German, French, Spanish, Italian, Chinese) Yes; Ultimate 64 bit, SP1
UL approval DIN/ISO 9001 Military use	Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation) 5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 85 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 Yes Yes Multi-Language User Interface (MUI): 6 languages (English, German, French, Spanish, Italian, Chinese)
UL approval DIN/ISO 9001 Military use	Yes Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation) 5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 85 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 Yes Yes Multi-Language User Interface (MUI): 6 languages (English, German, French, Spanish, Italian, Chinese) Yes; Ultimate 64 bit, SP1
UL approval DIN/ISO 9001 Military use	Yes Yes Yes Yes 5 °C; Max. 10 °C/h (no condensation) 45 °C; Max. 10 °C/h (no condensation) -20 °C; Max. 20 °C/h (no condensation) 60 °C; Max. 20 °C/h (no condensation) 5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 85 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14 Yes Yes Multi-Language User Interface (MUI): 6 languages (English, German, French, Spanish, Italian, Chinese) Yes; Ultimate 64 bit, SP1

 STEP 7 Professional (TIA Portal) 	No	
• STEP 7	No	
 WinCC flexible Advanced 2008 	No	
 WinCC Advanced (TIA Portal) 	No	
• STEP 5	No	
Mechanics/material		
Material of housing	metal	
Magnesium alloy	Yes	
Socket for Kensington lock	Yes	
rubber corner guards	Yes	
Dimensions		
Width	330 mm	
Height	32 mm	
Depth	214 mm	
Weights		
Weight, approx.	1.6 kg; incl. rechargeable battery	
Scope of supply		
Accumulator	Yes	
Power supply	Yes	
Recovery media	Yes; Restore & Recovery	
Other		
free hotline	Yes	
Note:	Made in Germany: development and production in Germany	

last modified: 2/5/2023 🖸