SIEMENS

Data sheet   **6ES7730-1AC04-0AC0**

SIMATIC IPC MD-57A 15.6" display Full HD (1920x 1080); Wi-Fi 6E Bluetooth V5.3 2x USB-C Gen 4; 3x USB-A Gen 3.2 x 2 1x USB-A Gen 2 2x RJ45 1GbE 1x HDMI 1.4b Intel® Core i7-12800HE processor (20 threads, 24 MB cache, up to 4.60 GHz) Intel® Iris® Xe graphics eligible 64 GB DDR5 SDRAM SO-DIMM 512 GB power supply cord with power plug: USA; keyboard: QWERTY without slider Windows 11 IoT Enterprise (version 22H2) 64-bit STEP 7 & WinCC & Safety Combo: STEP 7 Professional Combo, WinCC Advanced, Safety Advanced Combo (TIA Portal & Distributed) V19

General information	
Design of the programming device	Mobile computer
Display	
Design of display	15.6" full HD display in 16:9 format
Screen diagonal	15.6 in
Resolution (pixels)	
● Horizontal image resolution	1 920 pixel
● Vertical image resolution	1 080 pixel
General features	
● Non-reflecting	Yes
● Luminance	300 cd/m²
Backlighting	
● Type of backlighting	LED
Control elements	
Keyboard fonts	
● Design	QWERTZ, QWERTY or AZERTY
Touch operation	
● Integrated touch pad	Yes; Touch pad
Supply voltage	
Design of the power supply	External wide-range power supply, lithium ion battery
Rated value (DC)	19 V
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	i7-12800HE (2.4 to 4.6 GHz; 14 cores (6 performance cores; 8 efficient cores); 24 MB Smart Cache) or i5-12600HE (2.5 to 4.5 GHz; 12 cores (4 performance cores; 8 efficient cores); 18 MB Smart Cache)
Chipset	integrated at CPU
Hyper-threading	Yes
Turbo Boost Technology 2.0	Yes
Graphic	
Graphics controller	Intel® Iris® Xe Integrated Graphics Controller
Drives	
CD-RW	No
DVD-ROM	No
DVD-RW	No
Hard disk	No
SSD	Yes; M.2
● Memory capacity	512 Gbyte; Up to 2 TB SSD
TPM Security Chip	Yes; 2.0_
Memory	
Type of memory	DDR5 SO-DIMM
Work memory	
● Number of slots	2; max. 2x 32 GB

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Accumulator	
Replaceable	Yes; lithium polymer
Capacity	8 A·h

Interfaces	
Number of interfaces PROFIBUS DP	1; 1x PROFIBUS DP / MPI; 9-pin Sub-D socket; 9.6 kBaud to 12 MBaud
Number of RS 232 interfaces	1; 1x COM
Number of USB interfaces	6
● Type A	4; 2x USB-A 3.2 Gen1 and 2x USB-A 3.2 Gen2x1
● Type C	2; USB-C 4.0
Number of chip-card readers	1; Smart Card Reader (ISO/IEC 7816)
MPI	Yes
Bluetooth radio standard	Yes; V5.3
Multimedia card/SD card slot	2 in 1 (SDHC UHS-II, MMC)
Card reader for SIMATIC memory cards	SIMATIC memory cards (for S7-300/400), SMC (for S7-1x00), SIMATIC micro memory card (for S7-300/C7/ET 200) - including programming interfaces
Universal Audio Jack	No
Video interfaces	
● analog video signal (VGA)	Yes; via adapter from HDMI to VGA
● DVI-I	Yes; via adapter from HDMI to DVI
● DisplayPort	Yes; via adapter from HDMI to DisplayPort
Industrial Ethernet	
● Industrial Ethernet interface	2x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	Yes; Gigabit Ethernet; 2x RJ45 with 2 independent MAC/IP addresses
● Wake on LAN	Yes
● IAMT (Intel Active Management Technology)	Yes
WLAN	
● Type	IEEE802.a/b/g/n/ac R2/ax R2(PreStandard)

Interrupts/diagnostics/status information	
LED status display	4 status LEDs

EMC	
Interference immunity against discharge of static electricity	
● Interference immunity against discharge of static electricity acc. to IEC 61000-4-2	Yes; ±4 kV contact discharge acc. to IEC 61000-4-2, ESD; ±8 kV air discharge acc. to IEC 61000-4-2, 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	
IP degree of protection	IP30

Standards, approvals, certificates	
CE mark	Yes
CSA approval	Yes
UL approval	Yes
DIN/ISO 9001	Yes
Ecological footprint	
● environmental product declaration	Yes
Global warming potential	
— global warming potential, (total) [CO2 eq]	354 kg
— global warming potential, (during production) [CO2 eq]	171 kg
— global warming potential, (during operation) [CO2 eq]	208 kg
— global warming potential, (after end of life cycle) [CO2 eq]	-26.5 kg

Ambient conditions	
Ambient temperature during operation	
● min.	5 °C; Max. 10 °C/h (no condensation)
● max.	40 °C; Max. 10 °C/h (no condensation)
Ambient temperature during storage/transportation	

● min.	-20 °C; Max. 20 °C/h (no condensation)
● max.	60 °C; Max. 20 °C/h (no condensation)
Relative humidity	
● Operation, min.	5 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14
● Operation, max.	85 %; At 30 °C/h (no condensation); Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-14
Vibrations	
● Operation, tested according to IEC 60068-2-6	Yes
Shock testing	
● tested according to IEC 60068-2-27	Yes
● tested according to IEC 60068-2-29	No
Operating systems	
Local language of operating system	Multi-Language User Interface (MUI): 6 languages (English, German, French, Spanish, Italian, Chinese)
pre-installed operating system	
● Windows 11	Yes; Windows 11 IoT Enterprise (version 22H2)
Software	
Preinstalled	
● STEP 7 Professional (TIA Portal)	Yes; software version: V19
● STEP 7	Yes; Professional 2021 SR2
● WinCC flexible Advanced 2008	No
● WinCC Advanced (TIA Portal)	Yes; software version: V19
● STEP 5	No
Mechanics/material	
Material of housing	metal
Handle	Yes; retractable
Socket for Kensington lock	Yes
rubber corner guards	Yes
Dimensions	
Width	386 mm
Height	41 mm
Depth	281 mm
Weights	
Weight, approx.	2.8 kg; incl. rechargeable battery
Scope of supply	
Accumulator	Yes
Power supply	Yes
Backpack	Yes
SIMATIC Software	Yes
Recovery media	Yes; Restore & Recovery
Other	
free hotline	Yes
Note:	Made in Germany: development and production in Germany

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