

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 32 GB DDR5 SDRAM SO-DIMM 1 TB power supply cord with power plug: Switzerland; keyboard: QWERTZ without slider Windows 11 IoT Enterprise (version 22H2) 64-bit STEP 7 & WinCC & Safety in the TIA Portal: STEP 7 Professional, WinCC Advanced, Safety Advanced 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/m <sup>2</sup>
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® X <sup>e</sup> 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

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
<ul style="list-style-type: none"> <li>• Type A</li> <li>• Type C</li> </ul>	4; 2x USB-A 3.2 Gen1 and 2x USB-A 3.2 Gen2x1 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	
<ul style="list-style-type: none"> <li>• analog video signal (VGA)</li> <li>• DVI-I</li> <li>• DisplayPort</li> </ul>	Yes; via adapter from HDMI to VGA Yes; via adapter from HDMI to DVI Yes; via adapter from HDMI to DisplayPort
Industrial Ethernet	
<ul style="list-style-type: none"> <li>• Industrial Ethernet interface <ul style="list-style-type: none"> <li>— 100 Mbps</li> <li>— 1000 Mbps</li> </ul> </li> <li>• Wake on LAN</li> <li>• IAMT (Intel Active Management Technology)</li> </ul>	2x Ethernet (RJ45) Yes Yes; Gigabit Ethernet; 2x RJ45 with 2 independent MAC/IP addresses Yes Yes
WLAN	
<ul style="list-style-type: none"> <li>• Type</li> </ul>	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	
<ul style="list-style-type: none"> <li>• Interference immunity against discharge of static electricity acc. to IEC 61000-4-2</li> </ul>	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	
<ul style="list-style-type: none"> <li>• Interference immunity on supply cables</li> <li>• Interference immunity on signal cables</li> </ul>	±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) ±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	
<ul style="list-style-type: none"> <li>• environmental product declaration</li> </ul>	Yes
Global warming potential	
<ul style="list-style-type: none"> <li>— global warming potential, (total) [CO2 eq]</li> <li>— global warming potential, (during production) [CO2 eq]</li> <li>— global warming potential, (during operation) [CO2 eq]</li> <li>— global warming potential, (after end of life cycle) [CO2 eq]</li> </ul>	354 kg 171 kg 208 kg -26.5 kg
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>	5 °C; Max. 10 °C/h (no condensation) 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)
<b>Relative humidity</b>	
• 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
<b>Vibrations</b>	
• Operation, tested according to IEC 60068-2-6	Yes
<b>Shock testing</b>	
• tested according to IEC 60068-2-27	Yes
• tested according to IEC 60068-2-29	No
<b>Operating systems</b>	
Local language of operating system	Multi-Language User Interface (MUI): 6 languages (English, German, French, Spanish, Italian, Chinese)
<b>pre-installed operating system</b>	
• Windows 11	Yes; Windows 11 IoT Enterprise (version 22H2)
<b>Software</b>	
<b>Preinstalled</b>	
• 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
<b>Mechanics/material</b>	
Material of housing	metal
Handle	Yes; retractable
Socket for Kensington lock	Yes
rubber corner guards	Yes
<b>Dimensions</b>	
Width	386 mm
Height	41 mm
Depth	281 mm
<b>Weights</b>	
Weight, approx.	2.8 kg; incl. rechargeable battery
<b>Scope of supply</b>	
Accumulator	Yes
Power supply	Yes
Backpack	Yes
SIMATIC Software	Yes
Recovery media	Yes; Restore & Recovery
<b>Other</b>	
free hotline	Yes
Note:	Made in Germany: development and production in Germany
<b>Approvals / Certificates</b>	
<b>General Product Approval</b>	<b>Environment</b>



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