

SIMATIC Field PG M6 Advanced; i7-8850H (2.6 to 4.3 GHz; 6 kernels + hyper-threading; 9 MB Smart Cache); 15.6" display; Full HD (1920x 1080); WLAN 802.11ac & Bluetooth V5.0; DVD +/-RW; UHD Graphics 630; 2x 32 GB DDR4 SDRAM SO-DIMM; 512 GB SSD SATA (2.5"); without S5 interface, without S5-EPROMMER Power cable with power plug; Europe; Keyboard: QWERTZ/QWERTY (Germany); without NVME (M.2); Windows 10 IoT Enterprise 2021 LTSC, 64-bit; with USB flash drive (restore image; D&D) license for STEP 7 Professional Combo; WinCC Advanced Combo (TIA Portal & WinCC flexible); Safety Advanced Combo (TIA Portal & Distributed Safety); version of the preinstalled software and licenses V18

General information	
Design of the programming device	Notebook
Display	
Design of display	15.6" full HD display in 16:9 format
Resolution (pixels)	
<ul style="list-style-type: none"> Horizontal image resolution 	1 920 pixel
<ul style="list-style-type: none"> Vertical image resolution 	1 080 pixel
General features	
<ul style="list-style-type: none"> Non-reflecting 	Yes
<ul style="list-style-type: none"> Luminance 	300 cd/m ²
Backlighting	
<ul style="list-style-type: none"> Type of backlighting 	LED
Control elements	
Keyboard fonts	
<ul style="list-style-type: none"> Design 	QWERTZ/QWERTY or AZERTY (French); 87 keys
Touch operation	
<ul style="list-style-type: none"> Integrated touch pad 	Yes; Clickpad
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	
<ul style="list-style-type: none"> permissible range, lower limit 	47 Hz
<ul style="list-style-type: none"> permissible range, upper limit 	63 Hz
Processor	
Processor type	Intel Core i5-8400H (2.5 to 4.2 GHz, 4 cores and hyper-threading, 8 MB Smart Cache) or i7-8850H (2.6 to 4.3 GHz 6 cores and hyper-threading, 9 MB Smart Cache)
Chipset	Intel CM246
Hyper-threading	Yes
Turbo Boost Technology 2.0	Yes
Graphic	
Graphics controller	Intel® UHD Graphics 630
Drives	
SSD	Yes; Easy to replace
<ul style="list-style-type: none"> Memory capacity 	256 Gbyte; Up to 2 TB SSD
TPM Security Chip	Yes; 2.0 (version for China without TPM)
Memory	
Type of memory	DDR4 SO-DIMM
Work memory	
<ul style="list-style-type: none"> Number of slots 	2; can be equipped with 1x 8 GB, 1x 16 GB, 1x 32 GB or 2x32 GB
Accumulator	
Replaceable	Yes; Lithium-ion battery
Capacity	8.25 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; 25-pin socket
Number of USB interfaces	4
• Type A	3; 1x USB port incl. integrated charging function for USB devices (e.g. smartphone) - also with device switched off
• Type C	1; USB 3.1 Gen. 2
Number of chip-card readers	1; Smart Card Reader (ISO/IEC 7816)
Bluetooth radio standard	Yes; V5.0
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	Yes; Audio socket for 3.5 mm jack
Video interfaces	
• analog video signal (VGA)	Yes; via adapter from DVI to VGA
• DVI-I	Yes; 1x
• DisplayPort	Yes; 1x
Industrial Ethernet	
• Industrial Ethernet interface	2x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	Yes
• Wake on LAN	Yes
• IAMT (Intel Active Management Technology)	Yes
WLAN	
• Type	802.11ac
Interrupts/diagnostics/status information	
LED status display	Battery status, device status, access to HDD/DVD, access to SD/MMC, MPI/DP, S5 and S7 modules / Card Reader (except Smart Card Reader), Num Lock, Caps Lock, WLAN active
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)
Standards, approvals, certificates	
CE mark	Yes
CSA approval	Yes
UL approval	Yes
DIN/ISO 9001	Yes
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
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 10	Yes; Windows 10 Enterprise 64-bit
Software	
Preinstalled	
• STEP 7 Professional (TIA Portal)	Yes; software version: V16
• STEP 7	Yes; Professional 2017 SR2
• WinCC flexible Advanced 2008	Yes; Software version: SP5
• WinCC Advanced (TIA Portal)	Yes; software version: V16
• STEP 5	Yes; Optional; software version: STEP 5 V7.23 HF2 (incl. GRAPH 5/II V7.15)
Mechanics/material	
Material of housing	metal
Handle	Yes; retractable
Socket for Kensington lock	Yes
rubber corner guards	Yes
Dimensions	
Width	385 mm
Height	53 mm
Depth	275 mm
Weights	
Weight, approx.	3.4 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

last modified: 6/12/2023 