

SIMATIC Field PG M5 Advanced; I7-6820EQ (2.8 to 3.5 GHz; 4 kernels+hyperthreading; 8 MB SMART cache); 15.6" display; Full HD (1920x 1080); WLAN 802.11AC & Bluetooth V4.0; DVD +/-RW; HD graphic 530 2x 16 GB DDR4 SD-RAM SO-DIMM 1 TB HDD SATA (2.5"); with S5 interface, with S5-EPROMMER; incl. STEP 5 license; incl. S5-AG cable and EPROM adapter; Line cable with power plug: USA; Keyboard: QWERTZ/QWERTY Windows 10 Enterprise, 64 bit; License for STEP 7 Prof combo (V15 & 2017), WinCC Advanced combo (V15 & WinCC flexible 2008) Software version V15.0.0.0

General information	
Design of the programming device	Notebook
Display	
Design of display	15.6" full HD display in 16:9 format
Resolution (pixels)	
• Horizontal image resolution	1 920 Pixel
• Vertical image resolution	1 080 Pixel
General features	
• Non-reflecting	Yes
• Luminance	300 cd/m ²
Backlighting	
• Type of backlighting	LED
Control elements	
Keyboard fonts	
• Design	QWERTZ/QWERTY or AZERTY (French); 87 keys
Touch operation	
• 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	
• permissible range, lower limit	47 Hz
• permissible range, upper limit	63 Hz
Processor	
Processor type	Intel Core i5-6440EQ (2.7 GHz to 3.4 GHz, 4 cores, 6 MB Smart Cache) or i7-6820EQ (2.8 GHz to 3.5 GHz, 4 cores, 8 MB Smart Cache)
Chipset	Mobile Intel QM170

Hyper-threading	Yes; for Intel Core i7 processor
Turbo Boost Technology 2.0	Yes
Graphic	
Graphics controller	Intel® HD graphics 530
Drives	
DVD-RW	Yes
Hard disk	Yes; Easy to replace
• Memory capacity	1 Tbyte; HDD
SSD	Yes; Easy to replace
• Memory capacity	512 Gbyte; up to 1 TB SSD
TPM Security Chip	Yes; 2.0 (version for China without TPM)
Memory	
Type of memory	DDR4-SDRAM SO-DIMM
Work memory	
• Number of slots	2; Can be equipped with 1x 8 GB, 1x 16 GB or 2x 16 GB
Accumulator	
Replaceable	Yes; Lithium-ion battery
Capacity	8.8 A·h
Hardware configuration	
Slots	
• Number of ExpressCard slots	1; Type 34
Interfaces	
PROFIBUS/MPI	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; USB 3.0
• Type A	3; 1x USB port incl. integrated charging function for USB devices (e.g. smartphone) – also with device switched off
• Type C	1
Number of chip-card readers	1; Smart Card Reader (ISO/IEC 7816)
Bluetooth radio standard	Yes; V4.0
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 — 100 Mbps — 1000 Mbps - Wake on LAN - IAMT (Intel Active Management Technology)	2x Ethernet (RJ45) Yes Yes; Gigabit Ethernet; 2x RJ45 with 2 independent MAC/IP addresses Yes; Via Port 1 Yes
WLAN	
Type	802.11ac
Integrated Functions	
Monitoring functions	
Status LEDs	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 (to IEC 801-2/IEC 1000-4-2; ESD), ± 8 kV air 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)
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	
Additional info on operating system	Multi-Language User Interface (MUI): 6 languages (English, German, French, Spanish, Italian, Chinese)
pre-installed operating system	
• Windows 7	Yes; Ultimate 64 bit, SP1
Software	
Preinstalled	
• STEP 7 Professional 2010	Yes; Software version: SR4
• STEP 7 Professional (TIA Portal)	Yes; Software version: V14
• WinCC flexible Advanced 2008	Yes; Software version: SP3
• WinCC Advanced (TIA Portal)	Yes; Software version: V14
• 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
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