

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

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	2 x Ethernet (RJ45)
— 100 Mbps	Yes

— 1000 Mbps	Yes; Gigabit Ethernet; 2x RJ45 with 2 independent MAC/IP addresses
• Wake on LAN	Yes; Via Port 1
• IAMT (Intel Active Management Technology)	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
- STEP 7 Professional (TIA Portal)
- WinCC flexible Advanced 2008
- WinCC Advanced (TIA Portal)
- STEP 5

Yes; Software version: SR4

Yes; Software version: V14

Yes; Software version: SP3

Yes; Software version: V14

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

Warranty period

24 mo; except for: rechargeable battery (6 months)

Note:

Made in Germany: development and production in Germany

last modified:

04/12/2018