# **SIEMENS**

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# 6AV7240-5EB47-0PA0

SIMATIC IPC 477D, 22" Touch Display; 4 USB (back)+1 USB (front), Ethernet (10/100/1000) Core I3-3217UE; 1x Gbit Ethernet (IE/PN); 1x PROFINET (IRT, 3 ports); 2 GB; 2x RS-232 and 1x PCIE; Windows 7 Ultimate 64-bit, Replaceable without drive; SSD 240 GB Standard (MLC); Without SIMATIC software; 24 V DC industrial power supply

	power supply
General information	
Product type designation	IPC477D
Display	
Design of display	22" TFT touch
Resolution (pixels)	
Horizontal image resolution	1 920 Pixel
<ul> <li>Vertical image resolution</li> </ul>	1 080 Pixel
Backlighting	
MTBF backlighting (at 25 °C)	30 000 h
Control elements	
Input device	
Mouse, at front	Front USB 2.0 (500mA)
Keyboard fonts	
Function keys	No
alphanumeric keyboard	No
Touch operation	
Design as touch screen	Yes; analog, resistive
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Installation type/mounting	
Design	Panel PC, built-in unit
central design	Yes
distributed design	No
Mounting in portrait format possible	Yes
Supply voltage	
Type of supply voltage	100/240 V AC (autorange) 50/60 Hz; optional 24 V DC
Line frequency	
Rated value 50 Hz	Yes
• Rated value 60 Hz	Yes
Mains buffering	
Mains/voltage failure stored energy time	10 ms

Power loss

In full configuration	24 V DC: max. 74 W, PCIe APCB additionally 5 W
Processor	
Processor type	Celeron 827E (1C/1T, 1.40 GHz, 1.5 MB Cache); Core i3-3217UE (2C/4T, 1.60 GHz, 3 MB Cache); Core i7-3517UE (2C/4T, 1.70 (2.80) GHz, 4 MB Cache, iAMT)
Graphic	
Graphics controller	Intel HD graphics controller
Drives	
Optical drives	Optional: DVD±R±RW combi drive; on rear, can be operated from side
Hard disk	2.5" SATA hard disk, at least 320 GB
SSD	Yes; 1x 240 GB SSD, 1x 480 GB SSD
Memory	
Type of memory	DDR3-SDRAM
Main memory	2 / 4 / 8 GB; ECC optional
Capacity of main memory, max.	8 Gbyte
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags),	512 kbyte; 128 KB can be stored in the buffer time; optional
max.	
Hardware configuration	
Slots	
• free slots	1x PCIe (slot with card retainer), 1x slot for CFAST card
<ul> <li>Number of PCI slots</li> </ul>	1; Optional
<ul> <li>Number of compact flash slots</li> </ul>	2; CFast
Interfaces	
Number of PROFINET interfaces	3; 3 ports (IRT, with switch, optional)
USB port	4x USB 3.0 high speed/high current
Connection for keyboard/mouse	USB / USB
serial interface	COM1: 1x RS 232, COM2 (optional): 1x RS 232
Video interfaces	
Graphics interface	DVI VGA / DVI integrated
Industrial Ethernet	
Industrial Ethernet interface	Onboard, 2x 10/100 Mbit, RJ45, no plug-in card necessary
Interrupts/diagnostics/status information	
Bus diagnostics	Yes
Integrated Functions	
Monitoring functions	
Temperature monitoring	Yes
Watchdog	Yes
• Status LEDs	Yes

• Fan

Optional Monitoring function via network

### **EMC**

#### Interference immunity against discharge of static electricity

 Interference immunity against discharge of static electricity

± 6 KV contact discharge at the front in accordance with IEC 61000-4-2; ±4 kV, housing contact discharge at the back in accordance with IEC 61000-4-2; ± 8 kV air discharge in accordance with IEC 61000-4-2

#### Interference immunity against high-frequency electromagnetic fields

 Interference immunity against high frequency radiation

10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6

#### Interference immunity to cable-borne interference

±2 kV (to IEC 1000-4-4; 1995; burst); ±1 kV (to IEC 1000-4-5; • Interference immunity on supply cables 1995; surge symm); ±2 kV (to IEC 1000-4-5; 1995; surge asymm) ±2 kV acc. to IEC 61000-4-4, burst; length > 30 m; ±2 kV acc. to • Interference immunity on signal cables >30m IEC 61000-4-5, surge; length > 30 m

No

±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to • Interference immunity on signal cables < 30m IEC 61000-4-4; burst; length > 3 m

#### Interference immunity against voltage surge

±2 kV acc. to IEC 61000-4-5, surge asymmetric · asymmetric interference • symmetric interference ±1 kV acc. to IEC 61000-4-5, surge symmetric

#### Interference immunity to magnetic fields

• Interference immunity to magnetic fields at 50 Нъ

100 A/m; to IEC 61000-4-8

#### Emission of conducted and non-conducted interference

 Interference emission via line/AC current cables

EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A

## Degree and class of protection

= -9	
IP (at the front)	IP65
IP (rear)	IP20

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CE mark	Yes; CE marking / EC Declaration of Conformity
UL approval	Yes
• UL 508	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
FCC	Yes
EMC	CE, EN 61000-6-4; CISPR 22:2004 Class A; FCC Class A
Use in hazardous areas	

ATEX Zone 2	Yes; Optional
ATEX Zone 22	Yes; Optional

CULus Class I Zone 2, Division 2  Marine approval  Germanischer Lloyd (GL)  American Bureau of Shipping (ABS)  Bureau Veritas (BV)  Chel Norske Veritas (DNV)  Ek rosean Register of Shipping (KRS)  Nippon Kajii Kyokai (Class NK)   Ambient conditions  Ambient temperature during operation  Ambient temperature during operation  Ambient temperature during storage/transportation  min.  max.  Or C to +45 °C with full configuration  Ambient temperature during operation  Ambient temperature during operation  Parine  Minax.  Or C to +45 °C with full configuration  EC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (rith and disk)  Shock testing  Shock lesting  Shock load during operation  Coperating systems  pre-installed operating system  Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P; 32-bit, MUI  without operating system  Windows 7 Yes; Ultimate 32-bit of 64 bit  Dimensions  Overall depth  additional mounting depth (optical drive)  Dimensions  Overal	• IECEx Zone 2	Yes; Optional
Germanischer Lloyd (GL) American Bureau of Shipping (ABS) Bureau Veritas (BV) Pes Det Norske Veritas (DNV) Pes Det Norske Veritas (DNV) Pes Lloyds Register of Shipping (KRS) Nippon Kaiji Kyokai (Class NK)  Ambient conditions Ambient temperature during operation Ambient temperature during operation Ambient temperature during storage/transportation  inin. max. Co "C  Wibration resistance during operation acc. to IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)  Shock testing Shock load during operation  Dimensions  Operating systems Pre-installed operating system Pre-installed	• cULus Class I Zone 2, Division 2	Yes
American Bureau of Shipping (ABS) Bureau Veritas (BV) Det Norske Veritas (DNV) Yes Det Norske Veritas (DNV) Yes Lloyds Register of Shipping (LRS) Nippon Kaiji Kyokai (Class NK) Yes Nippon Kaiji Kyokai (Class NK)  Ambient conditions Ambient temperature during operation Ambient temperature during operation Ambient temperature during operation  Ambient temperature during operation  Ambient temperature during operation  Ambient temperature during operation  Ambient temperature during operation  Ambient temperature during operation  Ambient temperature during operation  inin.  max.  60 °C  Vibrations  Vibration resistance during operation acc. to IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)  Shock testing  Shock load during operation  IEC 60068-2-27; 150 m/s², 11 ms (without hard disk); 50 m/s², 30 ms (with hard disk)  Operating systems  pre-installed operating system  Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  without operating system  Windows 7  Yes; Optional  pre-installed operating system  Windows 7  Yes; Ultimate 32 bit or 64 bit  Dimensions  Operator panel width  Operator control unit (W x H) in mm  Operator panel height  Additional mounting depth (optical drive)  Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  Width  Height  Height  Height  Depth	Marine approval	
Bureau Veritas (BV)  Det Norske Veritas (DNV)  Korean Register of Shipping (KRS)  Lloyds Register of Shipping (LRS)  Nippon Kajii Kyokai (Class NK)  Pes  Ambient conditions  Ambient temperature during operation  Ambient temperature during operation  Ambient temperature during storage/transportation  min.  min.  min.  max.  60°C  Vibrations  Vibration resistance during operation acc. to IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)  Shock testing  Shock load during operation  Pre-installed operating system  pre-installed operating system  Pre-installed operating system  Windows 7 Ves: Optional  Pre-installed operating system  Windows 7 Ves: Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  Without operating system  Pre-installed operating system  Windows 7 Ves: Ultimate 32 bit or 64 bit  Dimensions  Operator panel width  Operator panel height  Additional mounting depth (optical drive)  Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  Width  Operator panel width  Height  Height  Depth  Pes	Germanischer Lloyd (GL)	Yes
Det Norske Veritas (DNV)     Korean Register of Shipping (KRS)     Lloyds Register of Shipping (LRS)     Nippon Kajii Kyokai (Class NK)      Ambient conditions  Ambient temperature during operation     Ambient temperature during operation     Ambient temperature during storage/transportation     min.	<ul><li>American Bureau of Shipping (ABS)</li></ul>	Yes
Korean Register of Shipping (KRS)     Lloyds Register of Shipping (LRS)     Nippon Kaiji Kyokai (Class NK)   Ambient conditions  Ambient temperature during operation     Ambient temperature during operation  Ambient temperature during storage/transportation      min.     -20 °C     max.  60 °C  Vibrations  Vibration resistance during operation acc. to IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)  Shock testing  Shock load during operation  IEC 60068-2-7; 150 m/s², 11 ms (without hard disk); 50 m/s², 30 ms (with hard disk)  Operating systems  pre-installed operating system  Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  without operating system  • Windows 7  Ves; Optional  pre-installed operating system  • Windows 7  Ves; Ultimate 32 bit or 64 bit  Dimensions  Overall depth  • additional mounting depth (optical drive)  Operator control unit (W x H) in mm  • Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  • Width  • Height  • Height  • Height  • Depth	Bureau Veritas (BV)	Yes
Lloyds Register of Shipping (LRS)   Yes     Nippon Kaiji Kyokai (Class NK)   Yes     Ambient conditions     Ambient temperature during operation   0 °C to +45 °C with full configuration     Ambient temperature during storage/transportation     Minimum	<ul><li>Det Norske Veritas (DNV)</li></ul>	Yes
Nippon Kaiji Kyokai (Class NK)  Ambient conditions  Ambient temperature during operation  Ambient temperature during operation  Ambient temperature during storage/transportation  min.	<ul><li>Korean Register of Shipping (KRS)</li></ul>	Yes
Ambient conditions  Ambient temperature during operation  • Ambient temperature during storage/transportation  • min. • max.  • max.  • Vibration resistance during operation acc. to IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)  Shock testing  • Shock load during operation  • Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  without operating system  • Windows 7  Vies; Ultimate 32 bit or 64 bit  Dimensions  Overall depth • additional mounting depth (optical drive)  Operator control unit (W x H) in mm  • Operator panel width • Operator panel height  Mounting dimensions in centralized configuration (W X H x D) in mm  • Width • Height • Height • Depth	<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	Yes
Ambient temperature during operation  • Ambient temperature during operation  • min.  • max.  60 °C  Vibrations  • Vibration resistance during operation acc. to IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)  Shock testing  • Shock load during operation  • Shock load during operation  • Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  without operating system  • Windows 7  Vibrations  Vindows 7  Vibration resistance during operation acc. to IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)  Shock testing  • Shock load during operation  IEC 60068-2-27; 150 m/s², 11 ms (without hard disk); 50 m/s², 30 ms (with hard disk)  Operating systems  pre-installed operating system  Vindows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  Ves; Optional  Yes; Optional  Yes; Ultimate 32 bit or 64 bit  Dimensions  Overall depth  • additional mounting depth (optical drive)  Operator control unit (W x H) in mm  • Operator panel width  • Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  • Width  • Width  • Height  • Height  • Depth	<ul> <li>Nippon Kaiji Kyokai (Class NK)</li> </ul>	Yes
Ambient temperature during operation  Ambient temperature during storage/transportation      • min.     • max.      • max.      • 00 °C  Vibrations      • Vibration resistance during operation acc. to IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)  Shock testing      • Shock load during operation      • Shock load during operation      • Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  without operating system      • Windows 7 Ultimate 32 bit or 64 bit  Dimensions  Overall depth      • additional mounting depth (optical drive)  Operator control unit (W x H) in mm      • Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm      • Windth      • Height      • Depth  Operator  Operator  Parison  Operator  Opera	Ambient conditions	
Ambient temperature during storage/transportation  • min.  • max.  60 °C  Vibrations  • Vibration resistance during operation acc. to IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)  Shock testing  • Shock load during operation  IEC 60068-2-27; 150 m/s², 11 ms (without hard disk); 50 m/s², 30 ms (with hard disk)  Operating systems  pre-installed operating system  Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  without operating system  • Windows 7  Yes; Ultimate 32 bit or 64 bit  Dimensions  Overall depth  • additional mounting depth (optical drive)  Operator control unit (W x H) in mm  • Operator control unit (W x H) in mm  • Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  • Width  • Width  • Height  • Depth  • Depth	Ambient temperature during operation	
<ul> <li>• min.</li> <li>• max.</li> <li>60 °C</li> <li>Vibrations</li> <li>• Vibration resistance during operation acc. to IEC 60068-2-6</li> <li>• Vibration resistance during operation acc. to IEC 60068-2-6</li> <li>• Vibration resistance during operation acc. to IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)</li> <li>Shock testing</li> <li>• Shock load during operation</li> <li>IEC 60068-2-27; 150 m/s², 11 ms (without hard disk); 50 m/s², 30 ms (with hard disk)</li> <li>Operating systems</li> <li>pre-installed operating system</li> <li>without operating system</li> <li>Pes; Optional</li> <li>pre-installed operating system</li> <li>• Windows 7</li> <li>Yes; Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI</li> <li>without operating system</li> <li>• Windows 7</li> <li>Yes; Ultimate 32 bit or 64 bit</li> <li>Dimensions</li> <li>Overall depth</li> <li>• additional mounting depth (optical drive)</li> <li>26 mm</li> <li>Operator control unit (W x H) in mm</li> <li>• Operator panel height</li> <li>Mounting dimensions in centralized configuration (W x H x D) in mm</li> <li>• Width</li> <li>• Height</li> <li>• Depth</li> <li>76 mm</li> </ul>	Ambient temperature during operation	0 °C to +45 °C with full configuration
**max.**     ** (brations**)  **Vibrations**  **Vibration resistance during operation acc. to IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)  **Shock testing**  **Shock load during operation**  **EC 60068-2-27; 150 m/s², 11 ms (without hard disk): 50 m/s², 30 ms (with hard disk)  **Operating systems**  **pre-installed operating system**  **Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  **without operating system**  **Pes; Optional**  **pre-installed operating system**  **Pes; Optional**  **Pes; Ultimate 32 bit or 64 bit**  **Dimensions**  **Overall depth**  **additional mounting depth (optical drive)**  **Operator control unit (W x H) in mm**  **Operator panel width**  **Operator panel width**  **Operator panel height**  **Mounting dimensions in centralized configuration (W x H x D) in mm**  **Width**  **Width**  **Height**  **Depth**  **But to 500 Hz: 9.8 m/s² (with S5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 200 Hz: 4.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 200 Hz: 4.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 200 Hz: 4.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 200 Hz: 4.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 200 Hz: 4.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 200 Hz: 4.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 200 Hz: 4.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 200 Hz: 4.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 200 Hz: 4.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 200 Hz: 4.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 200 Hz: 4.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 200 Hz: 4.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with S5 Hz to 200 Hz: 4.5 mm; 9 Hz to 500 Hz: 4.5 mm; 9	Ambient temperature during storage/transportation	
Vibrations  • Vibration resistance during operation acc. to IEC 60068-2-6    Vibration resistance during operation acc. to IEC 60068-2-6   Vibration resistance during operation acc. to IEC 60068-2-6   Vibration resistance during operation acc. to IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)    Shock testing	• min.	-20 °C
Vibration resistance during operation acc. to IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)  Shock testing  Shock load during operation  IEC 60068-2-27; 150 m/s², 11 ms (without hard disk); 50 m/s², 30 ms (with hard disk)  Operating systems  pre-installed operating system  Ves; Optional  Pre-installed operating system  Ves; Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  without operating system  Ves; Optional  Pre-installed operating system  Ves; Ultimate 32 bit or 64 bit  Dimensions  Overall depth  additional mounting depth (optical drive)  Operator control unit (W x H) in mm  Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  Width  Height  Height  Depth  To mm	● max.	60 °C
IEC 60068-2-6  (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)  Shock testing  • Shock load during operation  IEC 60068-2-27; 150 m/s², 11 ms (without hard disk); 50 m/s², 30 ms (with hard disk)  Operating systems  pre-installed operating system  • Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  without operating system  • Windows 7  Yes; Optional  pre-installed operating system  • Windows 7  Yes; Ultimate 32 bit or 64 bit  Dimensions  Overall depth  • additional mounting depth (optical drive)  Operator control unit (W x H) in mm  • Operator panel width  • Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  • Width  • Width  • Height  • Depth	Vibrations	
Shock load during operation  IEC 60068-2-27; 150 m/s², 11 ms (without hard disk); 50 m/s², 30 ms (with hard disk)  Operating systems  pre-installed operating system  Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  without operating system  Pre-installed operating system  Windows 7  Yes; Optional  Pre-installed operating system  Ves; Ultimate 32 bit or 64 bit  Operators  Overall depth  additional mounting depth (optical drive)  Operator control unit (W x H) in mm  Operator panel width  Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  Width  Height  Height  Depth  To mm  Height  To mm		(with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200
ms (with hard disk)  Operating systems  pre-installed operating system  Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  without operating system  • Windows 7  Yes; Optional  Pre-installed operating system  • Windows 7  Yes; Ultimate 32 bit or 64 bit  Operators  Overall depth  • additional mounting depth (optical drive)  Operator control unit (W x H) in mm  • Operator panel width  • Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  • Width  • Height  • Depth  To mm  • Depth	Shock testing	
pre-installed operating system  Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI  without operating system  Pre-installed operating system  Windows 7  Yes; Optional  Presided operating system  Ves; Ultimate 32 bit or 64 bit  Dimensions  Overall depth  additional mounting depth (optical drive)  Operator control unit (W x H) in mm  Operator panel width Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  Width Height Height Operator	Shock load during operation	
Standard 7 P, 32-bit, MUI  without operating system  Pre-installed operating system  Windows 7  Yes; Ultimate 32 bit or 64 bit   Dimensions  Overall depth  additional mounting depth (optical drive)  Operator control unit (W x H) in mm  Operator panel width  Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  Width  Width Height Height Operth	Operating systems	
pre-installed operating system  ● Windows 7  Yes; Ultimate 32 bit or 64 bit   Dimensions  Overall depth  ● additional mounting depth (optical drive)  Operator control unit (W x H) in mm  ● Operator panel width  ● Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  ● Width  ● Width  ● Height  ● Depth  Yes; Ultimate 32 bit or 64 bit  26 mm  560 mm  580 mm	pre-installed operating system	
Windows 7  Yes; Ultimate 32 bit or 64 bit  Dimensions  Overall depth  additional mounting depth (optical drive)  Operator control unit (W x H) in mm  Operator panel width  Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  Width  Height  Height  Depth  Yes; Ultimate 32 bit or 64 bit  26 mm  560 mm  580 mm  542 mm  76 mm	without operating system	Yes; Optional
Dimensions  Overall depth  additional mounting depth (optical drive)  Operator control unit (W x H) in mm  Operator panel width  Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  Width  Height  Depth  Depth	pre-installed operating system	
Overall depth  • additional mounting depth (optical drive)  Operator control unit (W x H) in mm  • Operator panel width  • Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  • Width  • Height  • Depth  Overall depth  26 mm  560 mm  380 mm	• Windows 7	Yes; Ultimate 32 bit or 64 bit
<ul> <li>additional mounting depth (optical drive)</li> <li>Operator control unit (W x H) in mm</li> <li>Operator panel width</li> <li>Operator panel height</li> <li>Mounting dimensions in centralized configuration (W x H x D) in mm</li> <li>Width</li> <li>Height</li> <li>Depth</li> <li>76 mm</li> </ul>	Dimensions	
Operator control unit (W x H) in mm  Operator panel width Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  Width Height Operator panel height  The state of th	Overall depth	
<ul> <li>Operator panel width</li> <li>Operator panel height</li> <li>Mounting dimensions in centralized configuration (W x H x D) in mm</li> <li>Width</li> <li>Height</li> <li>Depth</li> <li>Operator panel width</li> <li>380 mm</li> <li>542 mm</li> <li>76 mm</li> </ul>	<ul> <li>additional mounting depth (optical drive)</li> </ul>	26 mm
Operator panel height  Mounting dimensions in centralized configuration (W x H x D) in mm  Width Height Depth  Depth  Width To mm	Operator control unit (W x H) in mm	
Mounting dimensions in centralized configuration (W x H x D) in mm  • Width 542 mm  • Height 362 mm  • Depth 76 mm	Operator panel width	560 mm
x H x D) in mm	Operator panel height	380 mm
<ul> <li>Height</li> <li>Depth</li> <li>362 mm</li> <li>76 mm</li> </ul>		
• Depth 76 mm	• Width	542 mm
Зэри	Height	362 mm
Mounting cutout/device depth (W x H x T) 542 mm x 362 mm / 82 mm device depth	• Depth	76 mm
	Mounting cutout/device depth (W x H x T)	542 mm x 362 mm / 82 mm device depth

Weights	
Panel PC in central design, approx.	7 kg
last modified:	02/13/2020