


SIMATIC IPC847D (Rack PC) (Rack PC, 19", 4HU); 2x Gbit Ethernet (IE/PN), RJ45; 1x DVI-I; 2x display ports; 1x COM 1; 2x PS/2; audio; 4x USB 3.0 incl. 1x internal; 3x USB 2.0; Temp. and fan monitoring; Watchdog, Card retainer XEON E3-1268LV3 (4C/8T, 2.3 (3.3) GHz, 8 MB cache VT-D, AMT); mainboard without fieldbus RAID1, 1 TB (2x 1 TB HDD SATA, mirror disks), in removable frame, hot swap; and 240 GB SSD SATA (for operating system), in removable frame, front-side 16 GB DDR3 SD-RAM (2x 8 GB), Dual channel Bus module 11 slots: 7x PCI, 3x PCIe X4, 1x PCIe X16; DVD +/-RW (SLIM) without expansion (HW); Graphics onboard Windows Server 2012 R2 Standard Edition incl. 5 clients, 64 bit, MUI (de, en, fr, es, it) SIMATIC PC DiagMonitor V5.0 and Image&Partition Creator V3.5 enclosed 110/240V industrial power supply unit; with NAMUR, Power supply cable USA

| Installation type/mounting   |   |
|--|---|
| Mounting   | For horizontal and vertical installation; prepared for telescopic rails; 19" mounting bracket can be removed externally; tower kit (optional)   |
| Design   | Rack PC, 19", 4U  |
| Supply voltage   |   |
| Type of supply voltage   | 100/240 V AC (autorange) 50 / 60 Hz; optional redundant 100/240 V AC; optional 100/240 V AC with UPS functionality incl. maintenance-free lead-tin battery  |
| Line frequency   |   |
| <ul style="list-style-type: none"> <li>Rated value 50 Hz</li> <li>Rated value 60 Hz</li> </ul> | <p>Yes</p> <p>Yes</p>   |
| Mains buffering  |   |
| <ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>     | 20 ms   |
| Processor  |   |
| Processor type   | Xeon E3-1275 v3 (4C/8T, 3.5 (3.9) GHz, 8 MB cache); Xeon E3-1268L v3 (4C/8T, 2.3 (3.3) GHz, 8 MB cache); Core i5-4570TE (2C/4T, 2.7 (3.3) GHz, 4 MB cache); Core i3-4330TE (2C/4T, 2.4 GHz, 4 MB cache)   |
| Chipset  | Intel DH82C226 PCH  |
| Graphic  |   |
| Graphics controller  | Onboard graphics controller Intel HD 4600 Graphics integrated into the processor / PCI-Express graphics card (Dual Head: 2x VGA or 2x DVI-D) in the PCIe (x16) slot (optional)  |
| Drives   |   |
| Optical drives   | DVD±R/RW (SlimLine)   |
| Hard disk  | 500 GB HDD, 1 TB HDD, 2x 1 TB HDD, RAID1 (2x 1 TB HDD, mirror disks), RAID1 (2x 1 TB HDD, mirror disks) + 1x 1 TB HDD as hot spare, RAID5 (3x 1 TB HDD, striping with parity), RAID5 (3x 1 TB HDD, striping with parity) + 1x 1 TB HDD as hot spare; RAID1 (2x 1 TB HDD SAS, mirror disks), RAID5 (3x 1 TB HDD SAS, striping with parity), RAID5 (3x 1 TB HDD SAS, striping with parity) + 1x 1 TB HDD SAS as hot spare incl. PCIe (x8) RAID SAS controller incl. ZMCP module |
| SSD  | Yes; 240 GB SSD; RAID1 (2x 240 GB SSD, mirror disks)  |
| Slot for drives  | Mounted internally on the fixed hard disk support, or mounted internally in vibration/shock-absorbing hard disk support, or mounted at the front in the low-profile removable drive bay (hot-swap in RAID configurations)   |
| Memory   |   |
| Main memory  | 2 GB to 32 GB DDR3-1600 DIMM, ECC optional  |
| Capacity of main memory, max.  | 32 Gbyte  |
| Hardware configuration   |   |
| Slots  |   |
| <ul style="list-style-type: none"> <li>free slots</li> </ul>                                   | 11 slots: 7x PCI, 3x PCIe (x4) (1 lane), 1x PCIe (x16) or 3x PCI, 5x PCIe mech. (x16) (4x 4 lanes, 1x 8 lanes), 3x PCIe (x4); all modules to a length of 312 mm can be used   |
| Interfaces   |   |
| Interfaces/bus type  | 1x COM1, 1x COM2 (optional), 1x LPT (optional), 2x DisplayPort, 1x DVI-I, 2x PS/2, audio (Microphone In, Line Out), 7x USB, 2x Gigabit Ethernet, PROFIBUS or PROFINET optional  |
| PROFIBUS/MPI   | optionally onboard, isolated, max. 12 Mbit/s, no plug-in card necessary, CP 5622-compatible   |
| USB port   | 2x USB 3.0, 2x USB 2.0 rear, 1x USB 3.0, 1x USB 2.0 front, 1x USB 3.0   |

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|   | internal   |
| Connection for keyboard/mouse                                       | 2x PS/2  |
| serial interface  | COM1: 1x RS 232, COM2 (optional): 1x RS 232  |
| parallel interface  | optional LPT1  |
| Multimedia  |  |
| • Audio In/Out  | Yes  |
| • Microphone In   | Yes  |
| Video interfaces  |  |
| • Graphics interface  | 2x DisplayPort and 1x DVI-I onboard; 1x VGA via DVI-VGA adapter cable (optional); graphics card PCIe (x16), Dual Head (2x VGA or 2x DVI-D), 1 GB graphics memory (optional)          |
| Industrial Ethernet   |  |
| • Industrial Ethernet interface                                     | 2x Ethernet (RJ45)   |
| — 100 Mbps  | Yes  |
| — 1000 Mbps   | Yes  |
| <b>Integrated Functions</b>   |  |
| Monitoring functions  |  |
| • Temperature monitoring  | Yes  |
| • Watchdog  | Yes  |
| • Status LEDs   | POWER, ETHERNET 1, ETHERNET 2, PN   MPI / DP, WATCHDOG, TEMP, FAN, HDD0 ALARM, HDD1 ALARM, HDD2 ALARM, HDD   HDD3 ALARM  |
| • Fan   | Yes  |
| • Monitoring function via network                                   | Optional   |
| <b>EMC</b>  |  |
| Interference immunity against discharge of static electricity       |  |
| • Interference immunity against discharge of static electricity     | ±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to 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                   |  |
| • Interference immunity on supply cables                            | ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric  |
| • Interference immunity on signal cables >30m                       | ±2 kV acc. to IEC 61000-4-4, burst; ±2 kV acc. to IEC 61000-4-5, surge   |
| • Interference immunity on signal cables < 30m                      | ±1 kV acc. to IEC 61000-4-4, Burst   |
| Interference immunity against voltage surge                         |  |
| • asymmetric interference   | ±2 kV acc. to IEC 61000-4-5, surge asymmetric  |
| • symmetric interference  | ±1 kV acc. to IEC 61000-4-5, surge symmetric   |
| Interference immunity to magnetic fields                            |  |
| • Interference immunity to magnetic fields at 50 Hz                 | 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, FCC Class A, EN 61000-6-4, CISPR 22, EN 55022 Class B, EN 61000-3-2 Class D, EN 61000-3-3  |
| <b>Degree and class of protection</b>                               |  |
| IP (at the front)   | IP41   |
| IP (rear)   | IP20   |
| <b>Standards, approvals, certificates</b>                           |  |
| CE mark   | Yes; For use in industrial areas as well as domestic, business and commercial environments (emitted interference: EN 61000-6-3:2007 +A1:2011, noise immunity: EN 61000-6-2:2005)     |
| CSA approval  | Yes; Included in cULus   |
| UL approval   | Yes  |
| cULus   | Yes; UL 60950-1, file number E115352   |
| RCM (formerly C-TICK)   | Yes  |
| KC approval   | Yes  |
| EAC (formerly Gost-R)   | Yes  |
| EMC   | CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005  |
| Dust protection   | With front door closed: G2 EN 779, 99% of particles > 0.5 mm are filtered  |
| <b>Ambient conditions</b>   |  |
| Ambient temperature during operation                                |  |
| • min.  | 0 °C   |
| • max.  | 50 °C  |

|   |   |
|---|---|
| <b>Ambient temperature during storage/transportation</b>      |   |
| • min.  | -20 °C  |
| • max.  | 60 °C   |
| <b>Relative humidity</b>                                      |   |
| • Relative humidity   | Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% at 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation)  |
| <b>Vibrations</b>   |   |
| • Vibration resistance during operation acc. to IEC 60068-2-6 | tested according to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.0375 mm, 58 Hz to 500 Hz: 4.9 m/s <sup>2</sup> (0.5 g)   |
| <b>Shock testing</b>  |   |
| • Shock load during operation                                 | Tested according to IEC 60068-2-27, IEC 60068-2-29: half-sine: 50 m/s <sup>2</sup> (5 g), 30 ms, 100 shocks per axis  |
| <b>Operating systems</b>                                      |   |
| pre-installed operating system                                | Windows 7 Ultimate, multi-language (32-bit/64-bit), Windows 10 Enterprise 2015 LTSB, multi-language (64-bit), Windows 10 Enterprise 2016 LTSB, multi-language (64-bit), Windows Server 2008 R2 Standard Edition incl. 5 clients, multi-language (64-bit); Windows Server 2012 R2 Standard Edition incl. 5 clients, multi-language (64-bit); Windows Server 2016 Standard Edition incl. 5 clients, multi-language (64-bit) |
| Additional info on operating system                           | Multi-Language User Interface (MUI): 5 languages (English, German, French, Spanish, Italian)  |
| without operating system                                      | Yes   |
| <b>Software</b>   |   |
| SIMATIC Software  | Optionally in package with SIMATIC WinCC or WinCC flexible  |
| <b>Dimensions</b>   |   |
| Width   | 430 mm  |
| Height  | 177 mm; 4U  |
| Depth   | 444 mm  |
| <b>last modified:</b>   | 1/31/2021   |