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## Data sheet 6AV7241-7DC08-0FA1

SIMATIC IPC 477E 19" Touch (1366 x 768); with front USB; 4 USB (back), Ethernet (10/100/1000); XEON E3-1505L; 3x Gbit Ethernet (IE/PN); 16 GB; without RS 232/RS485; without PCIe; Windows 10 IoT Enterprise 2016 LTSB (64-bit) for Xeon; Without replaceable mass storage; 240 GB solid-state drive SATA Without SIMATIC software; 110/230 V AC industrial power supply unit with NAMUR; without power supply cord; - - no BIS certificate for India for 110/230 V AC PS,

| | |
|---|---|
| **General information** | |
| Product type designation | IPC477E |
| **Display** | |
| Design of display | 19" TFT touch |
| Screen diagonal | 18.5 in |
| Resolution (pixels) | |
| ● Horizontal image resolution | 1 366 pixel |
| ● Vertical image resolution | 768 pixel |
| Backlighting | |
| ● MTBF backlighting (at 25 °C) | 50 000 h |
| **Control elements** | |
| Input device | |
| ● Mouse, at front | No |
| Keyboard fonts | |
| ● Function keys | No |
| ● alphanumeric keyboard | No |
| Touch operation | |
| ● Design as touch screen | Yes; analog, resistive |
| **Installation type/mounting** | |
| Mounting | For horizontal and vertical 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 | 20 ms |
| **Power loss** | |
| In full configuration | 24 V DC: max. 65 W, PCIe APCB additionally 5 W |
| **Processor** | |
| Processor type | Celeron G3902 (2C/2T, 1.6 GHz, 2 MB Cache); Core i3-6102E (2C/4T, 1.9 GHz, 3 MB Cache); Core i5-6442EQ (4C/4T, 1.9 (2.7) GHz, 6 MB Cache, iAMT); Xeon E3-1505L v5 (4C/8T, 2.0 (2.8) GHz, 8 MB Cache, iAMT) |
| Chipset | Intel C236 / Intel H110 |
| **Graphic** | |
| Graphics controller | Intel HD graphics controller |
| **Drives** | |
| Hard disk | 2.5" SATA ≥ 320 GB |
| SSD | Yes; 128 / 240 / 480 GB |
| **Memory** | |
| Type of memory | DDR4-2400 SO-DIMM |
| Main memory | 4 / 8 / 16 GB, ECC optional |
| Capacity of main memory, max. | 16 Gbyte |
| **Data areas and their retentivity** | |


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| Retentive data area (incl. timers, counters, flags), max. | 512 kbyte; 128 KB can be stored in the buffer time; optional |
| **Hardware configuration** | |
| Slots | |
| ● free slots | 1x PCIe (slot with card retainer), 1x slot for CFAST card |
| ● Number of PCI slots | 1; Optional |
| ● Number of compact flash slots | 1; CFast |
| **Interfaces** | |
| Number of industrial Ethernet interfaces | 3; 3x Ethernet (RJ45) |
| USB port | 4x USB 3.0 |
| Connection for keyboard/mouse | USB / USB |
| Video interfaces | |
| ● Graphics interface | 2x DisplayPort |
| Industrial Ethernet | |
| ● Industrial Ethernet interface | 3x Ethernet (RJ45) |
| — 100 Mbps | Yes |
| — 1000 Mbps | Yes |
| **Interrupts/diagnostics/status information** | |
| Bus diagnostics | Yes |
| **Integrated Functions** | |
| Monitoring functions | |
| ● Temperature monitoring | Yes |
| ● Watchdog | Yes |
| ● Fan | No |
| ● Monitoring function via network | Optional |
| **EMC** | |
| 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, 80 ... 2 000 MHz, 80 % AM acc. to IEC 61000-4-3; 3 V/m, 2 ... 2.7 GHz; 10 V, 10 kHz ... 80 MHz 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 61000-4-5, surge, length > 30 m |
| ● Interference immunity on signal cables < 30m | ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m |
| 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, EN 61000-6-4, CISPR 22 Class B, FCC Class A |
| **Degree and class of protection** | |
| IP (at the front) | IP65 |
| IP (rear) | IP20 |
| **Standards, approvals, certificates** | |
| CE mark | Yes |
| CSA approval | Yes |
| UL approval | Yes |
| ● UL 508 | Yes |
| cULus | Yes |
| RCM (formerly C-TICK) | Yes |
| KC approval | Yes |
| EAC (formerly Gost-R) | 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, only with Multitouch |
| ● IECEx Zone 2 | Yes; Optional, only with Multitouch |


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|---|---|
| ● cULus Class I Zone 2, Division 2 | Yes; Optional, only with Multitouch |
| Marine approval | |
| ● Germanischer Lloyd (GL) | Yes |
| ● American Bureau of Shipping (ABS) | Yes |
| ● Bureau Veritas (BV) | Yes |
| ● Det Norske Veritas (DNV) | Yes |
| ● Korean Register of Shipping (KRS) | Yes |
| ● Lloyds Register of Shipping (LRS) | Yes |
| ● Nippon Kaiji Kyokai (Class NK) | Yes |
| **Ambient conditions** | |
| Ambient temperature during operation | |
| ● min. | 0 °C |
| ● max. | 45 °C |
| Ambient temperature during storage/transportation | |
| ● min. | -20 °C |
| ● max. | 60 °C |
| Relative humidity | |
| ● Relative humidity | Tested according to IEC 60068-2-78, IEC 60068-2-30: 5% to 80% at 25 °C (no condensation) |
| Vibrations | |
| ● Vibration resistance during operation acc. to IEC 60068-2-6 | 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 (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10 |
| without operating system | Yes; Optional |
| pre-installed operating system | |
| ● Windows 7 | Yes; Ultimate 64 bit |
| ● Windows 10 Enterprise | Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI |
| **Software** | |
| SIMATIC Software | Optionally with pre-installed SIMATIC WinCC RT Advanced / Software Controller CPU 1500S software bundle |
| **Dimensions** | |
| Width of the housing front | 483 mm |
| Height of housing front | 337 mm |
| Mounting cutout, width | 465 mm |
| Mounting cutout, height | 319 mm |
| Overall depth | 76 mm |
| **Weights** | |
| Weight, approx. | 8.4 kg |

**Classifications**

| | Version | Classification |
|---|---|---|
| eClass | 14 | 19-20-01-03 |
| eClass | 12 | 19-20-01-03 |
| eClass | 9.1 | 19-20-01-03 |
| eClass | 9 | 19-20-01-03 |
| eClass | 8 | 27-24-23-01 |
| eClass | 7.1 | 27-24-23-01 |
| eClass | 6 | 27-24-23-01 |
| ETIM | 10 | EC001414 |
| ETIM | 9 | EC001414 |
| ETIM | 8 | EC001414 |
| ETIM | 7 | EC001414 |

**Approvals / Certificates**

**General Product Approval**


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Miscellaneous | KC | Miscellaneous

| General Product Approval | For use in hazardous locations | Maritime application |
|---|---|---|

BIS CRS | Type Examination Certificate

| Maritime application | Dangerous goods |
|---|---|

CCS (China Classification Society) | Dangerous goods information

| Environment |
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Environmental Confirmations

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