

SIMATIC IPC 477D, 19" Touch Display; 4 USB (back)+1 USB (front), Ethernet (10/100/1000) Core i7-3517UE; 1x Gbit Ethernet (IE/PN); 1x PROFINET (IRT, 3 ports); 8 GB with NVRAM; 1x RS-232; without PCIE; Windows 7 Ultimate 64-bit, CFast 16 GB, (possible with SW, if no internal mass storage); SSD 240 GB Standard (MLC); Without SIMATIC software; 24 V DC industrial power supply

| Display                                    |                                                     |
|--------------------------------------------|-----------------------------------------------------|
| Design of display                          | 19" TFT touch                                       |
| Screen diagonal                            | 19 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                          | Front USB 2.0 (500mA)                               |
| 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 | 10 ms                                               |
| Power loss                                 |                                                     |
| In full configuration                      | 24 V DC: max. 65 W, PCie APGB 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), 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                           |  | 2; CFast                                                                                                                                              |
| Interfaces                                                |  |                                                                                                                                                       |
| PROFIBUS/MPI                                              |  | Optionally onboard, isolated, max. 12 Mbps, compatible with CP 5611                                                                                   |
| 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                             | 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 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                   |                                                                                                                                                                                                               |
| • Interference immunity on supply cables                            | ±2 kV (to IEC 1000-4-4; 1995; burst); ±1 kV (to IEC 1000-4-5; 1995; surge symm); ±2 kV (to IEC 1000-4-5; 1995; surge asymm)                                                                                   |
| • Interference immunity on signal cables >30m                       | ±2 kV acc. to IEC 61000-4-4, burst; length > 30 m; ±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; 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                                                                                                                                                               |
| • IECEx Zone 2                                                | Yes; Optional                                                                                                                                                               |
| • cULus Class I Zone 2, Division 2                            | Yes                                                                                                                                                                         |
| <b>Marine approval</b>                                        |                                                                                                                                                                             |
| • 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                                                                                                                                                                         |
| <b>Ambient conditions</b>                                     |                                                                                                                                                                             |
| <b>Ambient temperature during operation</b>                   |                                                                                                                                                                             |
| • Ambient temperature during operation                        | 0 °C to +45 °C with full configuration                                                                                                                                      |
| <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: 5% to 80% at 25 °C (no condensation)                                                                                    |
| <b>Vibrations</b>                                             |                                                                                                                                                                             |
| • 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/s <sup>2</sup> (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s <sup>2</sup> (hard disk) |
| <b>Shock testing</b>                                          |                                                                                                                                                                             |
| • Shock load during operation                                 | IEC 60068-2-27; 150 m/s <sup>2</sup> , 11 ms (without hard disk); 50 m/s <sup>2</sup> , 30 ms (with hard disk)                                                              |
| <b>Operating systems</b>                                      |                                                                                                                                                                             |
| Operating system                                              | Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI                                                                                         |
| pre-installed operating system                                | Yes                                                                                                                                                                         |
| without operating system                                      | Yes; Optional                                                                                                                                                               |
| <b>pre-installed operating system</b>                         |                                                                                                                                                                             |
| • Windows 7                                                   | Yes; Ultimate 32 bit or 64 bit                                                                                                                                              |
| <b>Software</b>                                               |                                                                                                                                                                             |
| SIMATIC Software                                              | Optionally with pre-installed software bundle SIMATIC WinCC RT Advanced / WinAC RTX                                                                                         |
| <b>Dimensions</b>                                             |                                                                                                                                                                             |
| <b>Overall depth</b>                                          |                                                                                                                                                                             |
| • additional mounting depth (optical drive)                   | 26 mm                                                                                                                                                                       |
| <b>Operator control unit (W x H) in mm</b>                    |                                                                                                                                                                             |
| • Operator panel width                                        | 483 mm                                                                                                                                                                      |

|                                                                    |                                      |
|--------------------------------------------------------------------|--------------------------------------|
| • Operator panel height                                            | 337 mm                               |
| Mounting dimensions in centralized configuration (W x H x D) in mm |                                      |
| • Width                                                            | 464 mm                               |
| • Height                                                           | 318 mm                               |
| • Depth                                                            | 76 mm                                |
| Mounting cutout/device depth (W x H x T)                           | 464 mm x 318 mm / 82 mm device depth |

## Weights

|                                     |         |
|-------------------------------------|---------|
| Panel PC in central design, approx. | 6 400 g |
|-------------------------------------|---------|

**last modified:** 06/08/2019