

SIMATIC IPC427E (Microbox PC), HD graphic onboard, 4x USB V3.0 (high current), PCIE (optional), Core i3-6102E; 3x Gbit Ethernet (IE/PN) Mounting onto standard rail; 4 GB; 2x RS232/485; 1x PCIe (x4); without operating system, Without replaceable mass storage; 256 GB Eco SSD; Without SIMATIC software; 24 V DC industrial power supply

| General information                                       |                                                                                                                                                                                                            |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product type designation                                  | IPC427E                                                                                                                                                                                                    |
| Installation type/mounting                                |                                                                                                                                                                                                            |
| Mounting                                                  | DIN rail, wall mounting, portrait mounting                                                                                                                                                                 |
| Design                                                    | Box PC, built-in unit                                                                                                                                                                                      |
| Supply voltage                                            |                                                                                                                                                                                                            |
| Type of supply voltage                                    | 24 V DC                                                                                                                                                                                                    |
| Rated value (DC)                                          | 24 V; PELV / SELV floating                                                                                                                                                                                 |
| Mains buffering                                           |                                                                                                                                                                                                            |
| • Mains/voltage failure stored energy time                | 20 ms                                                                                                                                                                                                      |
| 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                                                                                                                                                                                    |
| Storage                                                   |                                                                                                                                                                                                            |
| 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                          |                                                                                                                                                                                                            |
| Retentive data area (incl. timers, counters, flags), max. | 512 kbyte; 128 KB can be stored in the buffer time; optional                                                                                                                                               |
| Hardware configuration                                    |                                                                                                                                                                                                            |
| Slots                                                     |                                                                                                                                                                                                            |
| • Number of PCI slots                                     | 2; Optional                                                                                                                                                                                                |
| • Number of compact flash slots                           | 1; CFast                                                                                                                                                                                                   |
| Interfaces                                                |                                                                                                                                                                                                            |
| Number of industrial Ethernet interfaces                  | 3; Ethernet (2x RJ45, optional 3x RJ45)                                                                                                                                                                    |
| serial interface                                          | Without / 2x COM (RS 232 / 485 / 422; switchable)                                                                                                                                                          |
| Video interfaces                                          |                                                                                                                                                                                                            |
| • Graphics interface                                      | 2x DisplayPort                                                                                                                                                                                             |
| Industrial Ethernet                                       |                                                                                                                                                                                                            |
| • Industrial Ethernet interface                           |                                                                                                                                                                                                            |
| — 100 Mbps                                                | Yes                                                                                                                                                                                                        |
| — 1000 Mbps                                               | Yes                                                                                                                                                                                                        |
| Interrupts/diagnostics/status information                 |                                                                                                                                                                                                            |
| LED status display                                        | 1x power, 3x user                                                                                                                                                                                          |
| Bus diagnostics                                           | Yes                                                                                                                                                                                                        |
| Integrated Functions                                      |                                                                                                                                                                                                            |
| Monitoring functions                                      |                                                                                                                                                                                                            |
| • Temperature monitoring                                  | Yes                                                                                                                                                                                                        |
| • Fan                                                     | No                                                                                                                                                                                                         |
| • Monitoring function via network                         | Optional                                                                                                                                                                                                   |

|                                                               |                                                                                                         |
|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Degree and class of protection</b>                         |                                                                                                         |
| IP degree of protection                                       | IP20                                                                                                    |
| <b>Standards, approvals, certificates</b>                     |                                                                                                         |
| CE mark                                                       | Yes                                                                                                     |
| UL approval                                                   | Yes                                                                                                     |
| • UL 508                                                      | Yes                                                                                                     |
| cULus                                                         | Yes                                                                                                     |
| RCM (formerly C-TICK)                                         | Yes                                                                                                     |
| KC approval                                                   | Yes                                                                                                     |
| EAC (formerly Gost-R)                                         | Yes                                                                                                     |
| FCC                                                           | Yes                                                                                                     |
| <b>Use in hazardous areas</b>                                 |                                                                                                         |
| • ATEX Zone 2                                                 | Yes; for inscription on device rating plate                                                             |
| • ATEX Zone 22                                                | No                                                                                                      |
| • IECEx Zone 2                                                | Yes; for inscription on device rating plate                                                             |
| • IECEx Zone 22                                               | No                                                                                                      |
| • CCC Ex                                                      | Yes; for inscription on device rating plate                                                             |
| • cULus Class I Zone 1                                        | No                                                                                                      |
| • cULus Class I Zone 2, Division 2                            | Yes; for inscription on device rating plate                                                             |
| • cULus Class II Division 2                                   | No                                                                                                      |
| • FM Class I Division 2                                       | No                                                                                                      |
| • FM Class II Division 2                                      | No                                                                                                      |
| <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>                   |                                                                                                         |
| • min.                                                        | 0 °C                                                                                                    |
| • max.                                                        | 55 °C                                                                                                   |
| <b>Ambient temperature during storage/transportation</b>      |                                                                                                         |
| • min.                                                        | -40 °C                                                                                                  |
| • max.                                                        | 70 °C                                                                                                   |
| <b>Vibrations</b>                                             |                                                                                                         |
| • Vibration resistance during operation acc. to IEC 60068-2-6 | tested to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm, 58 Hz to 200 Hz: 9.8 m/s <sup>2</sup> (1 g)      |
| <b>Operating systems</b>                                      |                                                                                                         |
| 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                                                                                           |
| <b>pre-installed operating system</b>                         |                                                                                                         |
| • Windows 7                                                   | Yes; Ultimate 32 bit or 64 bit                                                                          |
| • Windows 10 Enterprise                                       | Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI                                                       |
| <b>Software</b>                                               |                                                                                                         |
| Pre-installed software                                        | Edge SW (Simatic, Sinumerik), optional                                                                  |
| <b>Dimensions</b>                                             |                                                                                                         |
| Width                                                         | 262 mm                                                                                                  |
| Height                                                        | 139.69999 mm                                                                                            |
| Depth                                                         | 55.5 mm; without PCIe                                                                                   |
| <b>Approvals / Certificates</b>                               |                                                                                                         |
| <b>General Product Approval</b>                               |                                                                                                         |



[Manufacturer Declaration](#)



#### General Product Approval

#### For use in hazardous locations



[BIS CRS](#)



#### For use in hazardous locations

#### Maritime application



IECEX

[Miscellaneous](#)

[CCC-Ex](#)



ABS



BUREAU  
VERITAS



DNV

#### Maritime application

#### Dangerous goods



LRS

[NK / Nippon Kaiji Kyokai](#)

[CCS \(China Classification Society\)](#)

[KR \(Korean Register of Shipping\)](#)

[Dangerous goods information](#)

[Test Summary Report UN 38.3](#)

#### Dangerous goods

#### Environment

[Dangerous goods information](#)

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