

SIMATIC IPC647C (Rack PC, 19", 2 HU); Interfaces: 2 x Gbit LAN(RJ45) 1x DVI-I; audio, 2x COM; 1x LPT; 2x PS/2; 4x USB 2.0 on rear, 2x USB 2.0 on the front; 1x USB 2.0 internal; Temp. and fan monitoring; Watchdog, Card retainer

| Supply voltage                |                                                                                                                                                                                             |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of supply voltage        | 100 - 240 V AC                                                                                                                                                                              |
| Line frequency                |                                                                                                                                                                                             |
| • Rated value 50 Hz           | Yes                                                                                                                                                                                         |
| • Rated value 60 Hz           | Yes                                                                                                                                                                                         |
| Processor                     |                                                                                                                                                                                             |
| Processor type                | Core i7-610E (2.53 GHz 2C/4T, 4 MB Cache, TB, VT-x, VT-d, EM64T); Core i5-520E (2.4 GHz, 2C/4T, 3 MB Cache, TB, VT-x, VT-d, EM64T); Core i3-330E (2.13 GHz, 2C/4T, 3 MB Cache, VT-x, EM64T) |
| Drives                        |                                                                                                                                                                                             |
| Hard disk                     | 250 GB or 500 GB SATA HDD, RAID1 HDD, 32 GB SATA SSD, installed internally in the shock and vibration-damped drive rack, or on the front drive support in the swap frame                    |
| Memory                        |                                                                                                                                                                                             |
| Type of memory                | DDR3-SDRAM                                                                                                                                                                                  |
| Main memory                   | 1 GB to 8 GB, ECC optional                                                                                                                                                                  |
| Capacity of main memory, max. | 8 Gbyte                                                                                                                                                                                     |
| Hardware configuration        |                                                                                                                                                                                             |
| Slots                         |                                                                                                                                                                                             |
| • free slots                  | 2x PCI, 1x PCIe x16 or 1x PCI, 1x PCIe x8 (4 lane), 1x PCIe x16; all modules up to 312 mm in length are supported                                                                           |
| Interfaces                    |                                                                                                                                                                                             |
| Interfaces/bus type           | 2x COM, 1x LPT, 1x DVI-I, 2x PS/2, audio (Microphone In, Line Out), 7x USB 2.0, 2x Gigabit Ethernet, PROFIBUS or PROFINET optional                                                          |
| PROFIBUS/MPI                  | onboard, isolated, max. 12 Mbit/s, CP 5611-compatible                                                                                                                                       |
| USB port                      | 2x USB 2.0 on front, 4x USB 2.0 on rear, 1x USB 2.0 internal                                                                                                                                |
| Connection for keyboard/mouse | 2x PS/2                                                                                                                                                                                     |
| serial interface              | COM1: 1 x V.24 (RS232), COM2: 1 x V.24 (RS232C)                                                                                                                                             |
| parallel interface            | LPT1 (EPP/ECP)                                                                                                                                                                              |
| Video interfaces              |                                                                                                                                                                                             |
| • Graphics interface          | 1 x DVI-I or 1 x VGA (via adapter) optional                                                                                                                                                 |

## Integrated Functions

### Monitoring functions

|                          |                                                                                                                   |
|--------------------------|-------------------------------------------------------------------------------------------------------------------|
| • Temperature monitoring | Yes                                                                                                               |
| • Watchdog               | Yes                                                                                                               |
| • Status LEDs            | POWER; HARD DISK; ETHERNET 1; ETHERNET 2;<br>PROFIBUS/MPI; SF PROFINET; WATCHDOG; TEMP; HDD1<br>ALARM; HDD2 ALARM |

## Standards, approvals, certificates

|         |     |
|---------|-----|
| CE mark | Yes |
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## Ambient conditions

### Ambient temperature during operation

|                                        |                                                                                                                                                                                 |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Ambient temperature during operation | +5 °C to +35 °C without restrictions, +5 °C to +45 °C no burner operation, +5 °C to +50 °C no ODD operation, power dissipation of the expansion modules in total less than 30 W |
| • min.                                 | 5 °C                                                                                                                                                                            |
| • max.                                 | 50 °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 | Tested according to IEC 60068-2-6: 10 cycles, 10 Hz to 58 Hz: 0.0375 mm, 58 Hz to 500 Hz: 4.9 m/s <sup>2</sup> (0.5 g) |
|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|

### Shock testing

|                               |                                                                                                                      |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------|
| • 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 |
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## Software

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| SIMATIC Software | Optional in a package with SIMATIC WinCC, WinCC flexible, or WinAC RTX |
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**last modified:** 03/29/2018