

SIMATIC IPC547G (Rack PC, 19", 4HU); Interfaces: 2x USB 3.0 on the front; 2x Intel Gigabit Ethernet, 2x PS/2, Audio on the rear side; 7 slots: 5x PCI Express, 2x PCI, Temperature and Fan monitoring; Watchdog; Card retainer

| General information                        |                                                                                                                                                                                                  |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product type designation                   | IPC547G                                                                                                                                                                                          |
| 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                                                                                                                           |
| Line frequency                             |                                                                                                                                                                                                  |
| • Rated value 50 Hz                        | Yes                                                                                                                                                                                              |
| • Rated value 60 Hz                        | Yes                                                                                                                                                                                              |
| Mains buffering                            |                                                                                                                                                                                                  |
| • Mains/voltage failure stored energy time | 20 ms                                                                                                                                                                                            |
| Processor                                  |                                                                                                                                                                                                  |
| Processor type                             | Xeon E3-1275 v5 (4C/8T, 3.6 (4.0) GHz, 8 MB Cache); Core i7-6700 (4C/8T, 3.4 (4.0) GHz, 8 MB Cache); Core i5-6500 (4C/4T, 3.2 (3.6) GHz, 6 MB Cache); Pentium G4400 (2C/2T, 3.3 GHz, 3 MB Cache) |
| Chipset                                    | Intel C236 / Intel H110                                                                                                                                                                          |
| Graphic                                    |                                                                                                                                                                                                  |
| Graphics controller                        | Onboard Intel HD graphics P530 / 530 / 510 integrated in processor; graphics card PCIe (x16) (dual head: 2x VGA or 2x DVI-D) (optional)                                                          |
| Drives                                     |                                                                                                                                                                                                  |
| Optical drives                             | DVD±R/RW (SlimLine)                                                                                                                                                                              |

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| Hard disk       | Internal installation: 1 TB HDD, 2x 1 TB HDD, RAID1 (2x 1 TB HDD), RAID1 (2x 1 TB HDD (Enterprise)); for front mounting in low-profile removable drive bay trays (hot-swap in RAID configuration): 1 TB HDD, 2x 1 TB HDD, RAID1 (2x 1 TB HDD), RAID1 (2x 1 TB HDD (Enterprise)), RAID1 (2x 2 TB HDD (Enterprise)), RAID1 (2x 2 TB HDD (Enterprise)) + 1x 2 TB HDD (Enterprise) as hot spare, RAID1 (2x 2 TB HDD (Enterprise)) + 1x 480 GB SSD, RAID5 (3x 2 TB HDD (Enterprise)), RAID5 (3x 2 TB HDD (Enterprise)) + 1x 2 TB HDD (Enterprise) as hot spare |
| SSD             | Yes; 1x 240 GB, 1x 480 GB SSD, 2x 480 GB SSD, RAID1 (2x 480 GB SSD)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Slot for drives | 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                   | 4 GB to 64 GB DDR4 2133 SDRAM |
| Capacity of main memory, max. | 64 Gbyte                      |

| Hardware configuration                                       |                                                                                                                                                                                                                                                                                                                                                                                                        |
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| Slots                                                        |                                                                                                                                                                                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>free slots</li> </ul> | 7 spare slots for expansions (all long); mainboard with H110 chipset: 1x PCIe (x16) Gen 3, 1x PCIe (x16) (1 lane) Gen 2, 1x PCIe (x8) (1 lane) Gen 2, 1x PCIe (x4) (1 lane) Gen 2, 1x PCIe (x4) (1 lane) Gen 2, 2x PCI; mainboard with C236 chipset: 1x PCIe (x16) Gen 3, 1x PCIe (x16) (4 lanes) Gen 3, 1x PCIe (x8) (1 lane) Gen 3, 1x PCIe (x4) (4 lane) Gen 3, 1x PCIe (x4) (1 lane) Gen 3, 2x PCI |

| Interfaces                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| Interfaces/bus type                                                                   | Interfaces mainboard (H110 chipset): 2x Intel Gigabit Ethernet (RJ45, teaming-capable), 4x USB 3.0: 2x on rear, 2x on front, 4x USB 2.0: 4x on rear, 1x DisplayPort V1.2, 1x DVI-D, 2x PS/2, audio: Line in, line out, micro; interfaces mainboard (C236 chipset): 2x Intel Gigabit Ethernet (RJ45, teaming-capable), 6x USB 3.0: 4x on rear, 2x on front, 5x USB 2.0: 4x on rear, 1x internal e.g. for software dongle with optional interlock, 2x DisplayPort V1.2, 1x DVI-D, 1x COM1, 2x PS/2, audio: line in, line out, micro |
| USB port                                                                              | Mainboard (H110 chipset): 4x USB 3.0: 2x on rear, 2x on front, 4x USB 2.0: 4x on rear; mainboard (C236 chipset): 6x USB 3.0: 4x on rear, 2x on front, 5x USB 2.0: 4x on rear, 1x internal e.g. for software dongle with optional interlock                                                                                                                                                                                                                                                                                        |
| Connection for keyboard/mouse                                                         | 2x PS/2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| serial interface                                                                      | COM1: 1x RS 232, COM2 (optional): 1x RS 232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| parallel interface                                                                    | optional LPT1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Multimedia                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>Audio In/Out</li> <li>Microphone In</li> </ul> | <p>Yes</p> <p>Yes</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Video interfaces                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

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| • Graphics interface                                                       | 2x DisplayPort and 1x DVI-D onboard; 1x VGA via DP-VGA adapter cable (optional); graphics card PCIe (x16), Dual Head (2x VGA or 2x DVI-D), 1 GB graphics memory (optional)                                                 |
| <b>Industrial Ethernet</b>                                                 |                                                                                                                                                                                                                            |
| • Industrial Ethernet interface                                            | 2x Ethernet (RJ45)                                                                                                                                                                                                         |
| — 100 Mbps                                                                 | Yes                                                                                                                                                                                                                        |
| — 1000 Mbps                                                                | Yes                                                                                                                                                                                                                        |
| <b>Integrated Functions</b>                                                |                                                                                                                                                                                                                            |
| <b>Monitoring functions</b>                                                |                                                                                                                                                                                                                            |
| • Temperature monitoring                                                   | Yes                                                                                                                                                                                                                        |
| • Watchdog                                                                 | Yes                                                                                                                                                                                                                        |
| • Status LEDs                                                              | POWER, HDD, TEMP, FAN, HDD0 ALARM, HDD1 ALARM, HDD2 ALARM, HDD3 ALARM                                                                                                                                                      |
| • Fan                                                                      | Yes                                                                                                                                                                                                                        |
| • Monitoring function via network                                          | Optional                                                                                                                                                                                                                   |
| <b>EMC</b>                                                                 |                                                                                                                                                                                                                            |
| <b>Interference immunity against discharge of static electricity</b>       |                                                                                                                                                                                                                            |
| • Interference immunity against discharge of static electricity            | ±4 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2                                                                                                                                   |
| <b>Interference immunity against high-frequency electromagnetic fields</b> |                                                                                                                                                                                                                            |
| • Interference immunity against high frequency radiation                   | 10 V/m for 80 - 1 000 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 1 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 150 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 |
| <b>Interference immunity to cable-borne interference</b>                   |                                                                                                                                                                                                                            |
| • 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                                                                                                                                                                                         |
| <b>Interference immunity against voltage surge</b>                         |                                                                                                                                                                                                                            |
| • asymmetric interference                                                  | ±2 kV acc. to IEC 61000-4-5, surge asymmetric                                                                                                                                                                              |
| • symmetric interference                                                   | ±1 kV acc. to IEC 61000-4-5, surge symmetric                                                                                                                                                                               |
| <b>Interference immunity to magnetic fields</b>                            |                                                                                                                                                                                                                            |
| • Interference immunity to magnetic fields at 50 Hz                        | 30 A/m; to IEC 61000-4-8                                                                                                                                                                                                   |
| <b>Emission of conducted and non-conducted interference</b>                |                                                                                                                                                                                                                            |
| • 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)                                                          | IP30                                                                                                                                                                                                                       |
| IP (rear)                                                                  | IP20                                                                                                                                                                                                                       |
| <b>Standards, approvals, certificates</b>                                  |                                                                                                                                                                                                                            |

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| Approval              | CE, cULus 60950, KCC                                                                                                                                                             |
| 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                                                                                                        |

## Ambient conditions

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|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient temperature during operation                          |                                                                                                                                                                         |
| • Ambient temperature during operation                        | 0 °C to +40 °C in full configuration (no burner mode), at +5 °C to +35 °C without limitation                                                                            |
| 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: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation) |
| Vibrations                                                    |                                                                                                                                                                         |
| • Vibration resistance during operation acc. to IEC 60068-2-6 | Tested according to IEC 60068-2-6, 10 cycles; 20 to 58 Hz: 0.015 mm; 58 to 200 Hz: 2 m/s <sup>2</sup> (0.2 g)                                                           |
| Shock testing                                                 |                                                                                                                                                                         |
| • Shock load during operation                                 | Tested according to IEC 60068-2-27; half-sine: 9.8 m/s <sup>2</sup> (1 g), 20 ms, 100 shocks per axis                                                                   |

## Operating systems

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating system                    | Windows 7 Ultimate, multi-language (32-bit/64-bit), Windows 10 Enterprise 2015 LTSC, multi-language (64-bit), Windows 10 Enterprise 2016 LTSC, 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) |
| pre-installed operating system      | Yes                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Additional info on operating system | Multi-Language User Interface (MUI): 5 languages (English, German, French, Spanish, Italian)                                                                                                                                                                                                                                                                                                                              |
| without operating system            | Yes                                                                                                                                                                                                                                                                                                                                                                                                                       |

## Software

|                  |                                                            |
|------------------|------------------------------------------------------------|
| SIMATIC Software | Optionally in package with SIMATIC WinCC or WinCC flexible |
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| Dimensions            |                                             |
|-----------------------|---------------------------------------------|
| Width                 | 430 mm                                      |
| Height                | 177 mm; 4U                                  |
| Depth                 | 446 mm; Device with short enclosure: 356 mm |
| <b>last modified:</b> | 09/10/2018                                  |