

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 Core i7-6700 (4C/8T, 3.4 (4.0) GHz, 8 MB cache, iAMT); Mainboard: (chipset C236, 1x DVI-D, 2x display ports V1.2, 4x USB 3.0 and 4x USB 2.0 on the rear side, 1x USB 2.0 internal, 1x COM 1; RAID onboard) RAID1, 1 TB (2x 1 TB HDD Enterprise), in interchangeable insert hot-swap, front-side 16 GB DDR4 SD-RAM (2x 8 GB), Dual Channel Enclosure blue chromated, 100/240V AC industrial power supply unit, DVD +/-RW (slim) PCIe x16 graphics card (dual head: 2x VGA or 2x DVI-D), 1 GB Windows Server 2012 R2 Standard edition incl. 5 clients, MUI (en/de/fr/it/es), 64 bit without expansions (software) Power supply cable Europe

| 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 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                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Slots                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • free slots                               | 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                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 chip set): 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                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • Audio In/Out                                                      | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • Microphone In                                                     | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Video interfaces                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • 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)                                                                                                                                                                                                                                                                                                                                                         |
| Industrial Ethernet                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • Industrial Ethernet interface                                     | 2x Ethernet (RJ45)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| — 100 Mbps                                                          | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| — 1000 Mbps                                                         | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Integrated Functions                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Monitoring functions                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| EMC                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Interference immunity against discharge of static electricity       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • 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                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Interference immunity against high-frequency electromagnetic fields |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • 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                                                                                                                                                                                                                                                                                                         |
| Interference immunity to cable-borne interference                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • Interference immunity on supply cables                            | ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric                                                                                                                                                                                                                                                                                                                                                                                                    |
| • Interference immunity on signal cables >30m                       | ±2 kV acc. to IEC 61000-4-4, 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 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                 | 30 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, FCC Class A, EN 61000-6-4, CISPR 22, EN 55022 Class B, EN 61000-3-2 Class D, EN 61000-3-3                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Degree and class of protection                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| IP (at the front)                                                   | IP30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| IP (rear)                                                           | IP20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Standards, approvals, certificates                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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)                                                                                                                                                                                                                                                                                                                                                   |

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| CSA approval                                                  | Yes; CAN/CSA-C22.2 No. 61010-2-201 Second Edition                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| UL approval                                                   | Yes; UL 61010-2-201 Second Edition, File E85972                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| cULus                                                         | Yes; UL 61010-2-201 Second Edition; CAN/CSA-C22.2 No. 61010-2-201 Second Edition                                                                                                                                                                                                                                                                                                                                                                                                      |
| RCM (formerly C-TICK)                                         | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| KC approval                                                   | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| EAC (formerly Gost-R)                                         | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| EMC                                                           | EN 61000-6-3; EN 61000-6-4; CISPR 22, EN 55022 Class B; FCC Class A; EN 61000-3-2 Class D; EN 61000-3-3                                                                                                                                                                                                                                                                                                                                                                               |
| Dust protection                                               | With front door closed: G2 EN 779, 99% of particles > 0.5 mm are filtered                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Ambient conditions</b>                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 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                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Operating systems</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| pre-installed 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 10 IoT Enterprise 2019 LTSC, multi-language (64-bit); Windows Server 2008 R2 Standard Edition incl. 5 multi-language clients (64-bit); Windows Server 2012 R2 Standard Edition incl. 5 multi-language clients (64-bit); Windows Server 2016 Standard Edition incl. 5 multi-language clients (64-bit) |
| Additional info on operating system                           | Multi-Language User Interface (MUI): 5 languages (English, German, French, Spanish, Italian)                                                                                                                                                                                                                                                                                                                                                                                          |
| without operating system                                      | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Software</b>                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| SIMATIC Software                                              | Optional package with SIMATIC WinCC                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Dimensions</b>                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Width                                                         | 430 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Height                                                        | 177 mm; 4U                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Depth                                                         | 446 mm; Device with short enclosure: 356 mm                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>last modified:</b>                                         | 8/18/2021                                                                                                                                                                                                                                                                                                                                                                                          |