

SIMATIC IPC227G 2x display ports; 3x 10/100/1000 Mbps Ethernet; 4x USB3.0, 2x M.2 expansion slot; 24 V DC industrial power supply Atom X6413E (4-core); 16 GB RAM; without COM; 240 GB SSD; without hardware extension; Windows 10 Enterprise 2021 LTSC, 64-bit; MUI (en,de,fr,it,es); mounting onto standard rail;

| General information                                                 |                                                                                          |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Product type designation                                            | IPC227G                                                                                  |
| Installation type/mounting                                          |                                                                                          |
| Mounting                                                            | DIN rail, wall mounting, portrait mounting                                               |
| Design                                                              | Box PC, built-in unit                                                                    |
| Supply voltage                                                      |                                                                                          |
| Type of supply voltage                                              | 24 V DC                                                                                  |
| Mains buffering                                                     |                                                                                          |
| • Mains/voltage failure stored energy time                          | 20 ms                                                                                    |
| Processor                                                           |                                                                                          |
| Processor type                                                      | Intel Atom X6211E / X6413E / X6414RE                                                     |
| Chipset                                                             | SoC                                                                                      |
| Graphic                                                             |                                                                                          |
| Graphics controller                                                 | Integrated                                                                               |
| Drives                                                              |                                                                                          |
| SSD                                                                 | Yes; 256 Eco                                                                             |
| Memory                                                              |                                                                                          |
| Type of memory                                                      | DDR4 SO-DIMM                                                                             |
| Main memory                                                         | 2 / 4 / 8 / 16 Gbyte; inband ECC optional                                                |
| Capacity of main memory, max.                                       | 16 Gbyte                                                                                 |
| Hardware configuration                                              |                                                                                          |
| Slots                                                               |                                                                                          |
| • free slots                                                        | 2x M.2                                                                                   |
| Interfaces                                                          |                                                                                          |
| Number of industrial Ethernet interfaces                            | 3; 3x Ethernet (RJ45)                                                                    |
| USB port                                                            | 4x USB 3.1                                                                               |
| Connection for keyboard/mouse                                       | USB / USB                                                                                |
| serial interface                                                    | without / 1x / 2x COM (RS 232 / 485 / 422; selectable)                                   |
| Video interfaces                                                    |                                                                                          |
| • Graphics interface                                                | 2x DisplayPort                                                                           |
| Industrial Ethernet                                                 |                                                                                          |
| • Industrial Ethernet interface                                     | 3x Ethernet (RJ45)                                                                       |
| — 100 Mbps                                                          | Yes                                                                                      |
| — 1000 Mbps                                                         | Yes                                                                                      |
| Protocols                                                           |                                                                                          |
| Protocols (Ethernet)                                                |                                                                                          |
| • TCP/IP                                                            | Yes                                                                                      |
| Integrated Functions                                                |                                                                                          |
| Monitoring functions                                                |                                                                                          |
| • Temperature monitoring                                            | Yes                                                                                      |
| • Watchdog                                                          | Yes                                                                                      |
| • Status LEDs                                                       | 1x power, 3x user                                                                        |
| • Fan                                                               | No                                                                                       |
| • Monitoring function via network                                   | Optional                                                                                 |
| EMC                                                                 |                                                                                          |
| Interference immunity against discharge of static electricity       |                                                                                          |
| • Interference immunity against discharge of static electricity     | ±6 kV contact discharge 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 and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6  |
| <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 61000-4-5, surge, length > 30 m                                                                                                                                     |
| • Interference immunity on signal cables < 30m                | ±1 kV (5 kHz/100 kHz) acc. to IEC 61000-4-4; burst; length < 30 m; ±2 kV (5 kHz/100 kHz) acc. to IEC 61000-4-4; burst; length > 30 m                                                  |
| <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           | 100 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, EN 61000-6-4, CISPR 22 Class B, FCC Class A                                                                                                                             |
| <b>Degree and class of protection</b>                         |                                                                                                                                                                                       |
| IP degree of protection                                       | IP40                                                                                                                                                                                  |
| <b>Standards, approvals, certificates</b>                     |                                                                                                                                                                                       |
| CE mark                                                       | Yes                                                                                                                                                                                   |
| cULus                                                         | Yes                                                                                                                                                                                   |
| RCM (formerly C-TICK)                                         | Yes                                                                                                                                                                                   |
| KC approval                                                   | Yes                                                                                                                                                                                   |
| EAC (formerly Gost-R)                                         | Yes                                                                                                                                                                                   |
| FCC                                                           | Yes                                                                                                                                                                                   |
| EMC                                                           | CE, EN 61000-6-4:2007, EN 61000-6-2:2005                                                                                                                                              |
| Dust protection                                               | Protection against foreign bodies > 1 mm                                                                                                                                              |
| <b>Ambient conditions</b>                                     |                                                                                                                                                                                       |
| <b>Ambient temperature during operation</b>                   |                                                                                                                                                                                       |
| • min.                                                        | 0 °C                                                                                                                                                                                  |
| • max.                                                        | 55 °C                                                                                                                                                                                 |
| <b>Ambient temperature during storage/transportation</b>      |                                                                                                                                                                                       |
| • min.                                                        | -20 °C                                                                                                                                                                                |
| • max.                                                        | 60 °C                                                                                                                                                                                 |
| <b>Relative humidity</b>                                      |                                                                                                                                                                                       |
| • Relative humidity                                           | Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation)               |
| <b>Vibrations</b>                                             |                                                                                                                                                                                       |
| • Vibration resistance during operation acc. to IEC 60068-2-6 | tested according to IEC 60068-2-6: 5 Hz to 8.4 Hz: 3.5 mm, 8.4 Hz to 200 Hz : 9.8m/s² (1 g) (except DIN Rail) 10 Hz to 58 Hz: 0.0375 mm, 58 Hz to 500 Hz: 4.9 m/s² (0.5 g) (DIN Rail) |
| <b>Shock testing</b>                                          |                                                                                                                                                                                       |
| • Shock load during operation                                 | Tested according to IEC 60068-2-27: 150 m/s², 11 ms                                                                                                                                   |
| <b>Operating systems</b>                                      |                                                                                                                                                                                       |
| pre-installed operating system                                | Windows 10 IoT Enterprise 2019 LTSC, 64 bit, MUI                                                                                                                                      |
| without operating system                                      | Yes; Optional                                                                                                                                                                         |
| <b>pre-installed operating system</b>                         |                                                                                                                                                                                       |
| • Windows 10                                                  | Yes; Windows 10 IoT Enterprise 2019 LTSC, 64 bit, MUI                                                                                                                                 |
| • Windows 10 Enterprise                                       | Yes; Windows 10 IoT Enterprise 2019 LTSC, 64 bit, MUI                                                                                                                                 |
| <b>Dimensions</b>                                             |                                                                                                                                                                                       |
| Width                                                         | 191 mm                                                                                                                                                                                |
| Height                                                        | 100 mm                                                                                                                                                                                |
| Depth                                                         | 64 mm                                                                                                                                                                                 |

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