## SIEMENS

## Data sheet

## 6AG4021-0AB11-1BA0



SIMATIC IPC127E; Atom E3940 (4C/4T), 4 GB RAM; Base version; 2x Ethernet RJ45, 2x USB3.0; Windows 10 Enterprise LTSB 2016, 64 bit, MUI (en, de, fr, it, es); 64 GB SSD; without mounting accessories

| General information  |                                    |
|--|------------------------------------|
| Product type designation                                     | IPC127E                            |
| Installation type/mounting                                   |                                    |
| Design   | Box PC, built-in unit              |
| Supply voltage   |                                    |
| Type of supply voltage                                       | 24 V DC                            |
| Mains buffering  |                                    |
| <ul> <li>Mains/voltage failure stored energy time</li> </ul> | 5 ms                               |
| Processor  |                                    |
| Processor type   | Intel Atom E3940, 1.6 GHz, 4 cores |
| Drives   |                                    |
| SSD  | Yes; 32 GB                         |
| Memory   |                                    |
| Type of memory   | DDR4                               |
| Main memory  | 4 GB RAM                           |
| Capacity of main memory, max.                                | 4 Gbyte                            |
| Hardware configuration                                       |                                    |
| Slots  |                                    |
| Number of PCI slots  | 0                                  |
| Interfaces   |                                    |
| Number of industrial Ethernet interfaces                     | 2; 2x RJ45 (independent)           |
| Number of PROFINET interfaces                                | 2                                  |
| USB port   | 2x USB 3.0                         |
| Connection for keyboard/mouse                                | USB / USB                          |
| Video interfaces   |                                    |
| Graphics interface   | 1x DisplayPort                     |
| Industrial Ethernet  |                                    |
| <ul> <li>Industrial Ethernet interface</li> </ul>            | 2x Ethernet (RJ45)                 |
| — 100 Mbps   | Yes                                |
| — 1000 Mbps  | Yes                                |
| Protocols  |                                    |
| Protocols (Ethernet)   |                                    |
| • TCP/IP   | Yes                                |
| Integrated Functions   |                                    |
| Monitoring functions   |                                    |
| <ul> <li>Temperature monitoring</li> </ul>                   | Yes                                |

| • Watchdog   | Yes  |
|--|--|
| Status LEDs  | 1x power, 3x user  |
| • Fan  | No   |
| EMC  |  |
| Interference immunity against discharge of static electricity  |  |
| Interference immunity against discharge of static<br>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 electromagnet   |  |
| <ul> <li>Interference immunity against high frequency radiation</li> </ul>   | 10 V/m, 80 MHz to 2 GHz, 80 % AM acc. to IEC 61000-4-3; 3 V/m, 2 GHz to 2.7 GHz, 80 % AM acc. to IEC 61000-4-3; 10 V, 10 kHz to 80 MHz, 80 % AM acc. to IEC 61000-4-6  |
| Interference immunity to cable-borne interference  |  |
| <ul> <li>Interference immunity on supply cables</li> </ul>   | $\pm$ 2 kV (according to IEC 61000-4-4; burst); $\pm$ 0,5 kV (according to IEC 61000-4-5; surge pulse/line to line); $\pm$ 1 kV (according to IEC 61000-4-5; surge pulse/line to ground)   |
| <ul> <li>Interference immunity on signal cables &gt;30m</li> </ul>   | ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m  |
| <ul> <li>Interference immunity on signal cables &lt; 30m</li> </ul>  | ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m   |
| Interference immunity to magnetic fields   |  |
| <ul> <li>Interference immunity to magnetic fields at 50 Hz</li> </ul>  | 100 A/m; to IEC 61000-4-8  |
| Emission of conducted and non-conducted interference   |  |
| <ul> <li>Interference emission via line/AC current cables</li> </ul>   | EN 61000-6-4:2007 +A1:2011 (industrial environments), EN 61000-6-<br>3:2007 +A1:2011 (residential environments), CISPR 22 Class B, FCC<br>Class A  |
| Degree and class of protection   |  |
| IP degree of protection  | IP40   |
| Standards, approvals, certificates   |  |
| CE mark  | Yes  |
|  | N .  |
| UL approval  | Yes  |
| Dust protection  | Yes<br>Protection against foreign bodies > 1 mm  |
|  |  |
| Dust protection  |  |
| Dust protection<br>Ambient conditions  |  |
| Dust protection         Ambient conditions         Ambient temperature during operation  | Protection against foreign bodies > 1 mm   |
| Dust protection Ambient conditions Ambient temperature during operation • Ambient temperature during operation   | Protection against foreign bodies > 1 mm   |
| Dust protection Ambient conditions Ambient temperature during operation  • Ambient temperature during operation Ambient temperature during storage/transportation  | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C   |
| Dust protection Ambient conditions Ambient temperature during operation • Ambient temperature during operation Ambient temperature during storage/transportation • min.  | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C   |
| Dust protection Ambient conditions Ambient temperature during operation  • Ambient temperature during operation Ambient temperature during storage/transportation  • min. • max.   | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C   |
| Dust protection Ambient conditions Ambient temperature during operation  • Ambient temperature during storage/transportation  • min. • max. Relative humidity  | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C<br>70 °C  |
| Dust protection         Ambient conditions         Ambient temperature during operation         • Ambient temperature during operation         Ambient temperature during storage/transportation         • min.         • max.         Relative humidity         • Relative humidity   | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C<br>70 °C  |
| Dust protection         Ambient conditions         Ambient temperature during operation         • Ambient temperature during operation         • Ambient temperature during storage/transportation         • min.         • max.         Relative humidity         • Relative humidity         • Vibrations         • Vibration resistance during operation acc. to IEC  | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C<br>70 °C<br>5 85 % at 30 °C, no condensation<br>Tested according to IEC 6068-2-6; 5 Hz to 9 Hz: 3.5 mm, 9 Hz to 500   |
| Dust protection         Ambient conditions         Ambient temperature during operation         • Ambient temperature during storage/transportation         • min.         • max.         Relative humidity         • Relative humidity         • Vibrations         • Vibration resistance during operation acc. to IEC 60068-2-6   | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C<br>70 °C<br>5 85 % at 30 °C, no condensation<br>Tested according to IEC 6068-2-6; 5 Hz to 9 Hz: 3.5 mm, 9 Hz to 500   |
| Dust protection         Ambient conditions         Ambient temperature during operation         • Ambient temperature during storage/transportation         • min.         • max.         Relative humidity         • Relative humidity         • Vibrations         • Vibration resistance during operation acc. to IEC 60068-2-6         Shock testing   | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C<br>70 °C<br>5 85 % at 30 °C, no condensation<br>Tested according to IEC 6068-2-6; 5 Hz to 9 Hz: 3.5 mm, 9 Hz to 500<br>Hz: 9,8 m/s <sup>2</sup>   |
| Dust protection         Ambient conditions         Ambient temperature during operation         • Ambient temperature during operation         Ambient temperature during storage/transportation         • min.         • max.         Relative humidity         • Relative humidity         • Vibrations         • Vibration resistance during operation acc. to IEC 60068-2-6         Shock testing         • Shock load during operation  | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C<br>70 °C<br>5 85 % at 30 °C, no condensation<br>Tested according to IEC 6068-2-6; 5 Hz to 9 Hz: 3.5 mm, 9 Hz to 500<br>Hz: 9,8 m/s <sup>2</sup>   |
| Dust protection         Ambient conditions         Ambient temperature during operation         • Ambient temperature during operation         • Ambient temperature during storage/transportation         • min.         • max.         Relative humidity         • Relative humidity         • Vibrations         • Vibration resistance during operation acc. to IEC 60068-2-6         Shock testing         • Shock load during operation  | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C<br>70 °C<br>5 85 % at 30 °C, no condensation<br>Tested according to IEC 6068-2-6; 5 Hz to 9 Hz: 3.5 mm, 9 Hz to 500<br>Hz: 9,8 m/s <sup>2</sup><br>Tested according to IEC 60068-2-27: 150 m/s <sup>2</sup> , 11 ms   |
| Dust protection         Ambient conditions         Ambient temperature during operation         • Ambient temperature during storage/transportation         • min.         • max.         Relative humidity         • Relative humidity         • Vibration resistance during operation acc. to IEC 60068-2-6         Shock testing         • Shock load during operation         Operating systems         pre-installed operating system   | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C<br>70 °C<br>5 85 % at 30 °C, no condensation<br>Tested according to IEC 6068-2-6; 5 Hz to 9 Hz: 3.5 mm, 9 Hz to 500<br>Hz: 9,8 m/s <sup>2</sup><br>Tested according to IEC 60068-2-27: 150 m/s <sup>2</sup> , 11 ms   |
| Dust protection         Ambient conditions         Ambient temperature during operation         • Ambient temperature during storage/transportation         • min.         • max.         Relative humidity         • Relative humidity         • Vibration resistance during operation acc. to IEC 60068-2-6         Shock testing         • Shock load during operation         Operating systems         pre-installed operating system   | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C<br>70 °C<br>5 85 % at 30 °C, no condensation<br>Tested according to IEC 6068-2-6; 5 Hz to 9 Hz: 3.5 mm, 9 Hz to 500<br>Hz: 9,8 m/s <sup>2</sup><br>Tested according to IEC 60068-2-27: 150 m/s <sup>2</sup> , 11 ms<br>Windows 10 Enterprise 2016 LTSB, 64 bit, MUI   |
| Dust protection         Ambient conditions         Ambient temperature during operation         • Ambient temperature during storage/transportation         • min.         • max.         Relative humidity         • Relative humidity         • Vibrations         • Vibration resistance during operation acc. to IEC 60068-2-6         Shock testing         • Shock load during operation         Operating systems         pre-installed operating system         • Windows 10 Enterprise                    | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C<br>70 °C<br>5 85 % at 30 °C, no condensation<br>Tested according to IEC 6068-2-6; 5 Hz to 9 Hz: 3.5 mm, 9 Hz to 500<br>Hz: 9,8 m/s <sup>2</sup><br>Tested according to IEC 60068-2-27: 150 m/s <sup>2</sup> , 11 ms<br>Windows 10 Enterprise 2016 LTSB, 64 bit, MUI   |
| Dust protection         Ambient conditions         Ambient temperature during operation         • Ambient temperature during storage/transportation         • min.         • max.         Relative humidity         • Relative humidity         • Vibrations         • Vibration resistance during operation acc. to IEC 60068-2-6         Shock testing         • Shock load during operation         Operating systems         pre-installed operating system         • Windows 10 Enterprise         Dimensions | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C<br>70 °C<br>5 85 % at 30 °C, no condensation<br>Tested according to IEC 6068-2-6; 5 Hz to 9 Hz: 3.5 mm, 9 Hz to 500<br>Hz: 9,8 m/s <sup>2</sup><br>Tested according to IEC 60068-2-27: 150 m/s <sup>2</sup> , 11 ms<br>Windows 10 Enterprise 2016 LTSB, 64 bit, MUI<br>Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI          |
| Dust protection         Ambient conditions         Ambient temperature during operation         • Ambient temperature during storage/transportation         • min.         • max.         Relative humidity         • Relative humidity         • Vibration resistance during operation acc. to IEC 60068-2-6         Shock testing         • Shock load during operation         Operating systems         pre-installed operating system         • Windows 10 Enterprise         Dimensions         Width        | Protection against foreign bodies > 1 mm<br>0 °C up to 55 °C<br>-20 °C<br>70 °C<br>5 85 % at 30 °C, no condensation<br>Tested according to IEC 6068-2-6; 5 Hz to 9 Hz: 3.5 mm, 9 Hz to 500<br>Hz: 9,8 m/s <sup>2</sup><br>Tested according to IEC 60068-2-27: 150 m/s <sup>2</sup> , 11 ms<br>Windows 10 Enterprise 2016 LTSB, 64 bit, MUI<br>Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI<br>S5 mm |