SIEMENS

Data sheet

6AG4141-5AA04-0FA0

SIMATIC IPC427E (Microbox PC), HD graphic onboard, 4x USB V3.0 (high current), PCIE (optional), Core i5-6442EQ; 3x Gbit Ethernet (IE/PN); Without mounting accessories; 4 GB; Without RS232/485, without PCIe; Windows 7 Ultimate SP1, 64-bit, MUI (de, en, es, fr, it); Without replaceable mass storage; 240 GB solid-state drive SATA Without SIMATIC software; 24 V DC industrial power supply

Product type designation IPC427E Installation type/mounting DIN rail, wall mounting, portrait mounting Mounting DIN rail, wall mounting, portrait mounting Design Box PC, built-in unit Supply voltage 24 V DC Mains buffering 20 ms • Mains/voltage failure stored energy time 20 ms Processor Processor type Celeron G3902 (2C/2T, 1.6 GHz, 2 MB Cache); Core i3-6102E (2C/4T, 1.9 GHz, 3 MB Cache); Core i5-6442EQ (4C/4T, 1.9 (2.7) GHz, 6 MB Cache, iAMT); Xeon E3-1505L v5 (4C/8T, 2.0 (2.8) GHz, 8 MB Cache, iAMT) Chipset Intel C236 / Intel H110 Graphic Intel HD graphics controller		supply
Installation type/mounting Mounting Mounting Dosign Box PC, built-in unit Supply voltage Type of supply voltage Annow Voltage failure stored energy time Valuar Sub PC, built-in unit Supply voltage Valuar Sub PC, built-in unit Supply voltage Valuar Sub PC, built-in unit Supply voltage Sub PC, built-in Unit Processor Vype Processor Processor Vype Processor	General information	
Mounting DN rail, wall mounting, portrait mounting Design Box PC, built-in unit Supply voltage 24 V DC Mains Suffering E Mains Suffering 20 ms Processor Celeron G3902 (2C2T, 1.6 GHz, 2 MB Cache); Core IS-6102E (2C4T, 1.9 GHz, 3 MB Cache); Core IS-6102E (2C4T, 1.9 GHz, 2 MB Cache); Core IS-6102E (2C4T, 1.9 CHZ, 2 MZ, 2 M	Product type designation	IPC427E
Design Box PC, built-in unit Supply voltage 24 V DC Mains buffering 24 V DC Mains buffering 20 ms Processor Celeron G3002 (2C/2T, 1.6 GHz, 2 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 3 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 1.9 G/2T, 0.42, 2 M/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 0.42, 2 M/2T, 0.42, 8 MB Cache), Core I3-6102E (2C/4T, 0.42, 2 M/2T, 0.42, 4 MB Cache), Core I3-6102E (2C/4T, 0.42, 2 M/2T, 0.42, 4 M/2T, 4 M/2T, 0.42, 4 M/2T,	Installation type/mounting	
Supply voltage 24 V DC Type of supply voltage 24 V DC Mains buffering 20 ms Processor Celeron G3902 (2C/2T, 1.6 GHz, 2 MB Cache), Core 13-6102E (2C/4T, 1.9 GHz, 3 MB Cache), Core 13-6102E (2C/4T, 1.9 GHz, 3 MB Cache), Core 13-6102E (2C/4T, 1.9 GHz, 2 MB Cache), Core 13-6102E (2C/4T, 1.9 GHz, 2 MB Cache), Core 13-6102E (2C/4T, 1.9 GHz, 6 MB Cache, IAMT) Chipeet Intel C326 / Intel H110 Chipest Intel G236 / Intel H110 Graphic 225 SATA > 320 GB SSD Yes; 128 / 240 / 480 GB Mannary USB Hard disk 2.5" SATA > 320 GB SSD Yes; 128 / 240 / 480 GB Mannary USB Type of memory JDR4-2400 SO-DIMM Mannemory 4 / 8 / 16 GB, ECC optional Capacity of main memory, max. 16 Gbyte Data areas and their retentivity State Cache (Mt), sch (M	Mounting	DIN rail, wall mounting, portrait mounting
Type of supply vollage 24 V DC Mains buffering 20 ms Processor Celeron G3002 (2C2T + 16 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MB Gache), Core (3-6102E (2C4T + 19 GHz, 2 MG GB), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4T + 19 GHz, 2 MS Gache), Core (3-6102E (2C4E + 19 GHz, 2 MS Gache), Core (3-6102E (2C4E + 19 GHz, 2 MS Gache), Core (3-6102E (2C4E + 19 GHz, 2 MS Gache), Core (3-6102E (2C4E + 19 GHz, 2 MS Gache), Core (3-6102E (2C4E + 19 GHz, 2 MS Gache), Core (3-6102E (2C4E + 19 GHz, 2 MS Gache), Core (3-6102E (2C4E + 19 GHz, 2 MS Gache), Core (3-6106 (10-6102E (2C4E + 19 GHz, 2 MS Gache), Core (3-6102E (2	Design	Box PC, built-in unit
Mains buffering 20 ms Processor Celeon G3002 (2C/2T. 16 GHz, 2 MB Gache). Core (3-61022 (2C/4T. 19 GZ) field, 2 MB Gache). Core (3-61022 (2C/4T. 19 GZ) field, 2 MB Gache). Core (3-61022 (2C/4T. 19 GZ) field, 2 MB Gache). Core (3-61022 (2C/4T. 19 GZ) field, 2 MB Gache). Core (3-61022 (2C/4T. 19 GZ) field, 2 MB Gache). Core (3-61022 (2C/4T. 19 GZ) field, 2 MB Gache). Core (3-61022 (2C/4T. 19 GZ) field, 2 MB Gache). Core (3-61022 (2C/4T. 19 GZ) field, 2 MB Gache). Core (3-61022 (2C/4T. 19 GZ) field, 2 MB Gache). Core (3-61022 (2C/4T. 19 GZ) field, 2 MB Gache). Core (3-61022 (2C/4T. 19 GZ) field, 2 MB Gache). Core (3-61022 (2C/4T. 19 GZ) field). Core (3-61024 (2C/4T. 19 GZ) field). Core (3-6104 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-6204 (3-	Supply voltage	
Mains buffering 20 ms Processor Celeron G3002 (2C/2T, 1.6 GHz, 2 MB Cache); Core i3-6102E (2C/4T, 1.9 GHz, 3 MB Cache); Core i3-46102E (2C/4T, 1.9 GHZ, 3 MC Cache); Core i3-46102E (2C/4T, 1.9 GHZ, 3	Type of supply voltage	24 V DC
• Mains/voltage failure stored energy time 20 ms Processor Celeron G3902 (2C/2T, 1.6 GHz, 2 MB Cache); Core i3-6102E (2C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHz, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MB Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MS Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MS Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MS Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MS Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MS Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MS Cache); Core i3-6402E (4C/4T, 1.9 (CF), GHZ, 6 MS Cache);		
Processor Processor type Processor type Celeron G3902 (2C/2T, 1 6 GHz, 2 MB Cache); Core IS-64102E (2C/4T, 1.9 (Geleron G3902 (2C/2T, 1 6 GHz, 2 MB Cache); Core IS-64102E (2C/4T, 1.9 (Chipset Chipset Intel C236 / Intel H110 Graphic Graphic Graphic controller Drives Optical drives Possible as external drive via USB Cash SD Ves: 128 / 240 / 480 GB Memory Type of memory Main memory A 18 / 16 GB, ECC optional Capacity of main memory, max. 16 Gbyte Data areas and their retentivity Retentive data area (ncl. timers, counters, flags), max. 16 Gbyte: 128 KB can be stored in the buffer time; optional Hard disk Siols • free slots • free slots • Number of Inclustrial Ethernet Interfaces Number of inclustrial Ethernet Interfaces Set DU Number of inclustrial Ethernet Interfaces • Star SD Number of inclustrial Ethernet Interfaces • Competitor for Keyboard/mouse • Graphics Itherface • Condition for Keyboard/mouse • Graphics Itherface • Compotitor for Keyboard/mouse • Capacity Interface • Capacity Interface • Compotitor for Keyboard/mouse • Capacity Interface • Capa	5	20 ms
Processor type Celeron C3902 (20:27, 1.8 GAzhe); Core IB-8102E (20:4T, 1.9 GHz, 3 MB Cache); Core IB-84422 0 (CoAT, 1.9 (2.7) GHz, 6 MB Cache, MMT); Xoon E3-1500L V6 (CoAT, 1.9 (2.7) GHz, 6 MB Cache, MMT); Xoon E3-1500L V6 (CoAT, 1.9 (2.7) GHz, 6 MB Cache, MMT); Xoon E3-1500L V6 (CoAT, 1.9 (2.7) GHz, 6 MB Cache, MMT); Xoon E3-1500L V6 (CoAT, 1.9 (2.7) GHz, 6 MB Cache, MMT); Xoon E3-1500L V6 (CoAT, 1.9 (2.7) GHz, 6 MB Cache, MMT); Xoon E3-1500L V6 (CoAT, 1.9 (2.7) GHz, 6 MB Cache, MMT); Xoon E3-1500L V6 (CoAT, 1.9 (2.7) GHz, 6 MB Cache, MMT); Xoon E3-1500L V6 (CoAT, 1.9 (2.7) GHz, 6 MB Cache, MMT); Xoon E3-1500L V6 (CoAT, 1.9 (2.7) GHz, 6 MB Cache, MMT); Xoon E3-1500L V6 (CoAT, 1.9 (2.7) GHz, 6 MB Cache, MMT); Xoon E3-1500L V6 (COAT, 1.9 (2.7) GHz, 6 MB Cache, MMT); Xoon E3-1500L V6 (CoAT, 1.9 (2.7) GHz, 6 MB Cache, MMT); Xoon E3-1500L V6 (COAT, 1.9 (2.7) GHz, 6 MB Cache, SD V5 V5 V5 (CoAT, 1.9 (2.7) GHZ, 7 (2.7) G		
GHz, 3 MB Cachej, Core IS-642EC (247, 1.9 (27) GHz, 6 MB Cache, IAMT) Ghipset Intel C236 / Intel H110 Graphics controller Drivos Optical drives Optical drives SSD SSD Mann memory Al /8 (JA GB), EDC optional Mann memory Al /8 (JA GB), EDC optional Capacity of main memory, max. Bate as area (incl. timers, counters, flags), max. Hard ware configuration Hardware configuration Stot		Celeron G3902 (2C/2T_1.6 GHz_2 MB Cache); Core i3-6102E (2C/4T_1.9
Graphic Intel HD graphics controller Optical drives possible as external drive via USB Hard disk 2.5° SATA ≥ 320 GB SSD Yes; 128 / 240 / 480 GB Memory DDR4-2400 SO-DIMM Memory DDR4-2400 SO-DIMM Main memory 4 / 8 / 16 GB, ECC optional Capacity of main memory, max. DBR4-2400 SO-DIMM Main memory 4 / 8 / 16 GB, ECC optional Capacity of main memory, max. 16 Gbyte Data areas and their rotentivity Top of free softs Retentive data area (incl. timers, counters, flags), max. 512 kbyte; 128 KB can be stored in the buffer time; optional Hardware configuration tic fee softs 2x PCle; optional: 1x PCle (x1, x4), with card retainer • Number of Compact flash slots 1; CFast thortace Number of industrial Ethernet interfaces 3; Ethernet (2x RJ45, optional 3x RJ45) USB JUSB VisB Jort 4x USB 3.0 Connection for keyboard/mouse USB / USB serial interface 3x Ethernet (RJ45) Yes • Oraphics interface 3x Ethernet (RJ45) Yes • Industrial Ethernet Ye		GHz, 3 MB Cache); Core i5-6442EQ (4C/4T, 1.9 (2.7) GHz, 6 MB Cache,
Graphics controller Intel HD graphics controller Optical drives possible as external drive via USB Hard disk 2.5" SATA ≥ 320 GB SSD Yes; 128 / 240 / 480 GB Memory DDR4-2400 SO-DIMM Main memory 4 / 8 / 16 GB, ECC optional Capacity of main memory, max. 16 Gbyte Data areas and their retentivity Retentive data area (incl. timers, counters, flags), max. Retentive data area (incl. timers, counters, flags), max. 512 kbyte; 128 KB can be stored in the buffer time; optional Hardware configuration Herefore Stots 2x PCIe; optional: 1x PCIe (x4); 2x PCIe (x1, x4), with card retainer Number of PCI slots 2; Optional Number of Industrial Ethernet interfaces 3; Ethernet (2x RJ45, optional 3x RJ45) USB port 4x USB 3.0 Connection for keyboard/mouse USB Stota 5x DisplayPort Industrial Ethernet Number of Industrial Ethernet • Industrial Ethernet 2x DisplayPort Industrial Ethernet 5x Ethernet (RJ45) - 100 Mbps Yes Integrated Functions Yes Integrated Functions Yes	Chipset	Intel C236 / Intel H110
Drives Optical drives possible as external drive via USB Hard disk 2.5" SATA > 320 GB SSD Yes; 128 / 240 / 480 GB Memory DDR4-2400 SO-DIMM Main memory 4 / 8 / 16 GB, ECC optional Capacity of main memory, max. 16 GB yte Data areas and their retentivity Retentive data area (incl. timers, counters, flags), max. Arases and their retentivity 512 kbyte; 128 KB can be stored in the buffer time; optional Hardware configuration 2x PCIe; optional: 1x PCIe (x4); 2x PCIe (x1, x4), with card retainer Stots 2x PCIe; optional: 1x PCIe (x4); 2x PCIe (x1, x4), with card retainer • Number of PCI slots 2; Optional • Number of notustrial Ethernet interfaces 3; Ethernet (2x RJ45, optional 3x RJ45) USB port 4x USB 3.0 Connection for keyboard/mouse USB / USB serial interface Without / 2x COM (RS 232 / 485 / 422; switchable) Vides interface 3x Ethernet (RJ45) - 100 Mbps Yes - 100 Mbps Yes Integrated Functions Yes Integrated Functions Yes	Graphic	
Optical drives possible as external drive via USB Hard disk 2.5" SATA ≥ 320 GB SSD Yes; 128 / 240 / 480 GB Memory DDR4-2400 SO-DIMM Main memory DDR4-2400 SO-DIMM Main memory A / 8 / 16 GB, ECC optional Capacity of main memory, max. 16 Gbyte Data areas and their retentivity Retentive data area (incl. timers, counters, flags), max. S105 • free slots • Number of PCI slots 2; Optional • Number of compact flash slots 1; CFast Interfaces USB port Video interfaces 3; Ethernet (2x RJ45, optional 3x RJ45) USB port 4x USB 3.0 Connection for keyboard/mouse USB / USB serial interface Without / 2x COM (RS 232 / 485 / 422; switchable) Video interfaces 2x DisplayPort Industrial Ethernet interface 3; Ethernet (RJ45) - 100 Mbps Yes <	Graphics controller	Intel HD graphics controller
Hard disk 2.5" SATA ≥ 320 GB SSD Yes; 128 / 240 / 480 GB Memory Type of memory Type of memory DDR4-2400 So-DIMM Main memory 4 / 8 / 16 GB, ECC optional Capacity of main memory, max. 16 Gbyte Data areas and their retentivity Test Solution Retentive data area (incl. timers, counters, flags), max. 512 kbyte; 128 KB can be stored in the buffer time; optional Hardware configuration 512 kbyte; 128 KB can be stored in the buffer time; optional Hardware configuration 512 kbyte; 128 KB can be stored in the buffer time; optional Number of PCI slots 512 kbyte; 128 KB can be stored in the buffer time; optional • Number of PCI slots 2x PCIe; optional: 1x PCIe (x4); 2x PCIe (x1, x4), with card retainer • Number of Compact flash slots 1; CFast Interfaces 3; Ethernet (2x RJ45, optional 3x RJ45) USB port 4x USB 3.0 Connection for keyboard/mouse USB / USB serial interface USB / USB Video interfaces 2x DisplayPort Industrial Ethernet interface 3x Ethernet (RJ45) • Graphics interface 3x Ethernet (RJ45) • On Mps Yes - 1000 Mps Yes - 1000 Mps Yes - 1000 Mps Yes <t< td=""><td>Drives</td><td></td></t<>	Drives	
Hard disk 2.5" SATA ≥ 320 GB SSD Yes; 128 / 240 / 480 GB Memory Type of memory Type of memory DDR4-2400 So-DIMM Main memory 4 / 8 / 16 GB, ECC optional Capacity of main memory, max. 16 Gbyte Data areas and their retentivity Test Solution Retentive data area (incl. timers, counters, flags), max. 512 kbyte; 128 KB can be stored in the buffer time; optional Hardware configuration 512 kbyte; 128 KB can be stored in the buffer time; optional Hardware configuration 512 kbyte; 128 KB can be stored in the buffer time; optional Number of PCI slots 512 kbyte; 128 KB can be stored in the buffer time; optional • Number of PCI slots 2x PCIe; optional: 1x PCIe (x4); 2x PCIe (x1, x4), with card retainer • Number of Compact flash slots 1; CFast Interfaces 3; Ethernet (2x RJ45, optional 3x RJ45) USB port 4x USB 3.0 Connection for keyboard/mouse USB / USB serial interface USB / USB Video interfaces 2x DisplayPort Industrial Ethernet interface 3x Ethernet (RJ45) • Graphics interface 3x Ethernet (RJ45) • On Mps Yes - 1000 Mps Yes - 1000 Mps Yes - 1000 Mps Yes <t< td=""><td>Optical drives</td><td>possible as external drive via USB</td></t<>	Optical drives	possible as external drive via USB
SSD Yes; 128 / 240 / 480 GB Memory DDR4-2400 SO-DIMM Main memory DDR4-2400 SO-DIMM Main memory, max. 16 Gbyte Data areas and their retentivity Fetentive data area (incl. timers, counters, flags), max. Retentive data area (incl. timers, counters, flags), max. 512 kbyte; 128 KB can be stored in the buffer time; optional Hardware configuration Stots • free slots 2x PCle; optional: 1x PCle (x4); 2x PCle (x1, x4), with card retainer • Number of PCl slots 2; Optional • Number of PCl slots 2; Optional • Number of compact flash slots 1; CFast Interfaces Just USB Jon Video interfaces 3; Ethernet (2x RJ45, optional 3x RJ45) USB port 4x USB 3.0 Connection for keyboard/mouse USB / USB serial interface Without / 2x COM (RS 232 / 485 / 422; switchable) • Video interfaces 3x Ethernet (RJ45) • Graphics interface 2x DisplayPort Industrial Ethernet interface 3x Ethernet (RJ45) • 1000 Mbp	· · · · · · · · · · · · · · · · · · ·	
Type of memory DDR4-2400 SO-DIMM Main memory 4 / 8 / 16 GB, ECC optional Capacity of main memory, max. 16 Gbyte Data areas and their retentivity Retentive data area (incl. timers, counters, flags), max. Retentive data area (incl. timers, counters, flags), max. 512 kbyte; 128 KB can be stored in the buffer time; optional Hardware configuration Stots 512 kbyte; 128 KB can be stored in the buffer time; optional Hardware configuration Stots 2x PCIe; optional: 1x PCIe (x4); 2x PCIe (x1, x4), with card retainer • Number of PCI slots 2; Optional 1x VPCIe (x4); 2x PCIe (x1, x4), with card retainer • Number of industrial Ethernet interfaces 3; Ethernet (2x RJ45, optional 3x RJ45) USB 3.0 Connection for keyboard/mouse USB / USB serial interface Without / 2x COM (RS 232 / 485 / 422; switchable) Video interface USplayPort Industrial Ethernet industrial Ethernet • Industrial Ethernet interface 3x Ethernet (RJ45) -100 Mbps — 100 Mbps Yes Yes InterfaceS Yes Interface Industrial Ethernet interface 3x Ethernet (RJ45) — 1000 Mbps	SSD	Yes; 128 / 240 / 480 GB
Type of memory DDR4-2400 SO-DIMM Main memory 4 / 8 / 16 GB, ECC optional Capacity of main memory, max. 16 Gbyte Data areas and their retentivity Retentive data area (incl. timers, counters, flags), max. Retentive data area (incl. timers, counters, flags), max. 512 kbyte; 128 KB can be stored in the buffer time; optional Hardware configuration Stots 512 kbyte; 128 KB can be stored in the buffer time; optional Hardware configuration Stots 2x PCIe; optional: 1x PCIe (x4); 2x PCIe (x1, x4), with card retainer • Number of PCI slots 2; Optional 1x VPCIe (x4); 2x PCIe (x1, x4), with card retainer • Number of industrial Ethernet interfaces 3; Ethernet (2x RJ45, optional 3x RJ45) USB 3.0 Connection for keyboard/mouse USB / USB serial interface Without / 2x COM (RS 232 / 485 / 422; switchable) Video interface USplayPort Industrial Ethernet industrial Ethernet • Industrial Ethernet interface 3x Ethernet (RJ45) -100 Mbps — 100 Mbps Yes Yes InterfaceS Yes Interface Industrial Ethernet interface 3x Ethernet (RJ45) — 1000 Mbps		
Main memory 4 / 8 / 16 GB, ECC optional Capacity of main memory, max. 16 Gbyte Data areas and their retentivity	•	DDR4-2400 SO-DIMM
Capacity of main memory, max. 16 Gbyte Data areas and their retentivity Retentive data area (incl. timers, counters, flags), max. 512 kbyte; 128 KB can be stored in the buffer time; optional Hardware configuration Stots Stots 2x PCIe; optional: 1x PCIe (x4); 2x PCIe (x1, x4), with card retainer • Number of PCI slots 2; Optional • Number of compact flash slots 1; CFast Interfaces 3; Ethernet (2x RJ45, optional 3x RJ45) USB port 4x USB 3.0 Connection for keyboard/mouse USB / USB serial interface Without / 2x COM (RS 232 / 485 / 422; switchable) Video interfaces 2x DisplayPort Industrial Ethernet 2x DisplayPort Industrial Ethernet 3x Ethernet (RJ45) - 100 Mbps Yes Interrupts/diagnostics/status information Yes Bus diagnostics Yes Integrated Functions Yes		
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- 1000 Mbps Yes Interrupts/diagnostics/status information Bus diagnostics Yes Integrated Functions Monitoring functions • Temperature monitoring Yes		
Interrupts/diagnostics/status information Bus diagnostics Yes Integrated Functions Monitoring functions • Temperature monitoring Yes		
Bus diagnostics Yes Integrated Functions Monitoring functions • Temperature monitoring Yes		Yes
Integrated Functions Monitoring functions • Temperature monitoring Yes		
Monitoring functions Yes		Yes
Temperature monitoring Yes	Integrated Functions	
	Monitoring functions	
• Watchdog Yes	Temperature monitoring	Yes
	Watchdog	Yes

Status LEDs	1x power, 3x user
● Fan	No
 Monitoring function via network 	Optional
MC	
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 field	S
 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
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 61000-4-5, surge, length > 30 m
• Interference immunity on signal cables < 30m	± 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 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	100 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, EN 61000-6-4, CISPR 22 Class B, FCC Class A
egree and class of protection	
IP degree of protection	IP20
tandards, approvals, certificates	
CE mark	Yes
UL approval	Yes
• UL 508	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
	Yes
KC approval EAC (formerly Gost-R)	Yes
FCC	Yes
EMC	
Use in hazardous areas	CE, EN 55022A, EN 61000-6-4, EN 61000-6-2
ATEX Zone 2	Yes; Optional
IECEx Zone 2	Yes; Optional
	Yes; Optional
cULus Class I Zone 2, Division 2	res, Optional
Marine approval	Vec
Germanischer Lloyd (GL)	Yes
American Bureau of Shipping (ABS)	Yes
Bureau Veritas (BV) Dat Nareka Veritas (DNN)	Yes
Det Norske Veritas (DNV)	Yes
Korean Register of Shipping (KRS)	Yes
Lloyds Register of Shipping (LRS)	Yes
 Nippon Kaiji Kyokai (Class NK) 	Yes
mbient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	55 °C
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Relative humidity	
Relative humidity	Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% at 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation)
Vibrations	
• Vibration resistance during operation acc. to IEC 60068- 2-6	tested to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm, 58 Hz to 200 Hz: 9.8 m/s² (1 g)
Shock testing	
 Shock load during operation 	Tested to DIN IEC 60068-2-29: 50 m/s² (5 g), 30 ms, 100 shocks

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Operating systems	
pre-installed operating system	Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10
without operating system	Yes; Optional
pre-installed operating system	
Windows 7	Yes; Ultimate 32 bit or 64 bit
 Windows 10 Enterprise 	Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI
Software	
SIMATIC Software	Optionally with pre-installed SIMATIC WinCC RT Advanced / Software Controller CPU 1500S software bundle
Dimensions	
Width	262 mm
Height	139.7 mm
Depth	55.5 mm

last modified:

6/25/2021 🖸