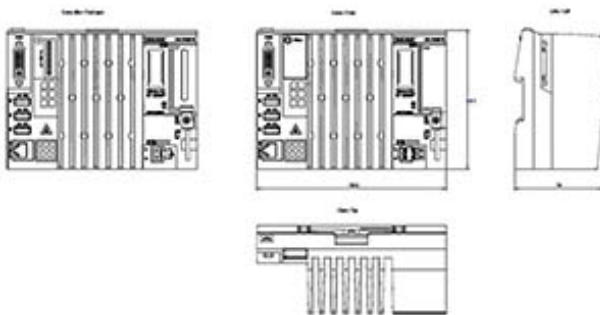


SIPLUS ET 200SP CPU 1515SP PC SPARE 4GB 0 ... +60 °C with conformal coating BasedOn:6ES7677-2AA40-0AA0 . CPU 1515SP PC. spare part 4 GB RAM,without CFAST, Interfaces: 1x slot CFAST, 1x slot SD/MMC, 1x connection for ET 200SP Bus- Adapter PROFINET, 1x 10/100/1000 Mbit/s Ethernet 3x USB, 1x DVI-I graphics card connection



General information	
Product type designation	CPU 1515SP PC
HW functional status	FS03
Installed software	
• Visualization	No
• Control	No
Control elements	
Mode selector switch	1
Supply voltage	
Type of supply voltage	24 V DC
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Mains buffering	
• Mains/voltage failure stored energy time	5 ms
Input current	
Current consumption (rated value)	1.5 A; Full processor load, incl. ET 200SP modules and using USB

Current consumption (in no-load operation), typ.	0.6 A
Inrush current, max.	4.7 A; Rated value
Power	
Active power input, max.	36 W; incl. ET 200SP modules and using USB
Infeed power to the backplane bus	8.75 W
Power loss	
Power loss, typ.	15 W; without ET 200SP modules and without using USB
Processor	
Processor type	Dual-Core 1 GHz, AMD G Series APU T40E
Memory	
Type of memory	DDR3-SDRAM
Main memory	4 GB RAM
CFast memory card	No
Hardware configuration	
Integrated power supply	Yes
Rack	
<ul style="list-style-type: none"> • Modules per rack, max. 	64; CPU + 64 modules + server module (mounting width max. 1 m)
<ul style="list-style-type: none"> • Number of lines, max. 	1
Time of day	
Clock	
<ul style="list-style-type: none"> • Type 	Hardware clock
<ul style="list-style-type: none"> • Hardware clock (real-time) 	Yes; Resolution: 1 s
<ul style="list-style-type: none"> • Backup time 	6 wk; At 40 °C ambient temperature, typically
<ul style="list-style-type: none"> • Deviation per day, max. 	10 s; Typ.: 2 s
Interfaces	
Number of industrial Ethernet interfaces	1
Number of PROFINET interfaces	1
Number of USB interfaces	3; 3x USB 2.0 on the front, 500 mA each – of which 2x 500 mA and 1x 100 mA simultaneously
Number of SD card slots	1
Video interfaces	
<ul style="list-style-type: none"> • Graphics interface 	1x DVI-I
1. Interface	
Interface type	PROFINET
automatic detection of transmission rate	Yes
Autonegotiation	Yes
Autocrossing	Yes
Interface types	
<ul style="list-style-type: none"> • Number of ports 	2

• integrated switch	Yes
• RJ 45 (Ethernet)	Yes; Via BusAdapter BA 2x RJ45
— Transmission rate, max.	100 Mbit/s
— Industrial Ethernet status LED	Yes

2. Interface

Interface type	Integrated Ethernet interface
Physics	RJ45
automatic detection of transmission rate	Yes
Autonegotiation	Yes
Autocrossing	Yes

Interface types	
• Number of ports	1
• RJ 45 (Ethernet)	Yes; Integrated
— Transmission rate, max.	1 000 Mbit/s
— Industrial Ethernet status LED	No

Interface types	
RS 485	
• Transmission rate, max.	12 Mbit/s

EMC	
Emission of radio interference acc. to EN 55 011	
• Limit class A, for use in industrial areas	Yes

Standards, approvals, certificates	
CE mark	Yes

Ambient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	60 °C; Up to 60 °C with max. 32 ET 200SP modules and 3x 100 mA USB load; up to 55 °C with max. 64 ET 200SP modules and 2x max. 500 mA and 1x max. 100 mA USB load
• horizontal installation, min.	0 °C; = Tmin
• horizontal installation, max.	60 °C; = Tmax; up to 60 °C with max. 32 ET 200SP modules and 3x 100 mA USB load; up to 55 °C with max. 64 ET 200SP modules and 2x max. 500 mA and 1x max. 100 mA USB load
• vertical installation, min.	0 °C; = Tmin
• vertical installation, max.	50 °C; = Tmax; at max. 32 ET 200SP modules and 3x 100 mA USB load
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	5 000 m

<ul style="list-style-type: none"> • Ambient air temperature-barometric pressure-altitude 	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax - 20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
Relative humidity	
<ul style="list-style-type: none"> • With condensation, tested in accordance with IEC 60068-2-38, max. 	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation
Vibrations	
<ul style="list-style-type: none"> • Operation, tested according to IEC 60068-2-6 • Transport, tested acc. to IEC 60068-2-6 	Yes Yes
Shock testing	
<ul style="list-style-type: none"> • tested according to IEC 60068-2-6 • tested according to IEC 60068-2-27 • tested according to IEC 60068-2-29 • Storage/transport, tested acc. to IEC 60068-2-27 	Yes Yes Yes Yes
Resistance	
Coolants and lubricants	
— Resistant to commercially available coolants and lubricants	Yes
Use in stationary industrial systems	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
from supply voltage 1L+	
— Note regarding classification of environmental conditions acc. to EN 60721	* The supplied plug covers must remain in place over the unused interfaces during operation!
Peripherals/Options	
Peripherals	
<ul style="list-style-type: none"> • SD card 	Optionally for additional mass storage
Dimensions	
Width	160 mm
Height	117 mm

Depth	75 mm
Weights	
Weight, approx.	0.83 kg
last modified:	05/18/2018