







SIMATIC IPC BX-59A (box PC); mainboard (chipset R680E); 4x Gigabit Ethernet (IE/PN) RJ45; 6x USB 3.1 Gen. 2; 1x USB-C, 2x serial (COM); 2x DP; audio; 2x SIM slots; 2x M.2 flex module slots internal; RAID controller onboard; watchdog, temperature/fan monitoring; Core i7-13700E, 65 W; 16C(8P+8E)/24T, 1.9(5.1) GHz; with 24 V DC, 400 W power supply RAID1 2*1TB M.2 NVME SSDs [Eco] in the SIMATIC IPC slider 32 GB DDR5(1*32) ECC without hardware extension (M.2) no power supply unit cable Windows 10 Enterprise LTSC 2021, 64-bit, MUI, for Core i7, for Core i9 (with USB-Stick restore image; D&D) EM2: PCIe x 16 Gen 4 + graphics card NVIDIA RTX A4000 and PCIe x 4 EM without storage

General information	
Product type designation	BX-59A
Installation type/mounting	
Mounting	Wall mounting, book mounting, desk mounting, tower mounting
Design	Box PC, built-in unit
Supply voltage	
Rated value (DC)	24 V; 12...24 V DC on 220 W
Rated value (AC)	240 V; 100 - 240V, 50/60Hz
Line frequency	
<ul style="list-style-type: none"> Rated value 50 Hz Rated value 60 Hz 	<ul style="list-style-type: none"> Yes Yes
Mains buffering	
<ul style="list-style-type: none"> Mains/voltage failure stored energy time 	20 ms
Processor	
Processor type	Core i9-13900E 24C (8P+16E)/32T, 1.8 (5.2) GHz, 36 MB cache; Core i7-13700E 16C (8P+8E)/24T, 1.9 (5.1) GHz, 30 MB cache; Core i7-13700TE 16C (8P+8E)/24T, 1.1 (4.8) GHz, 30 MB cache; Core i5-13500E 14C (6P+8E)/20T, 2.4 (4.6) GHz, 24 MB cache
Chipset	Intel R680E
Graphic	
Graphics controller	Intel UHD Graphics 770 (Core i5, Core i7, Core i9)
Graphics card	Yes; Optional
Drives	
SSD	Yes; base module: 480 GB 2.5" SATA SSD (PLP); 960 GB 2.5" SATA SSD (PLP); 512 GB 2.5" SATA SSD; 1 TB 2.5" SATA SSD; 512 GB M.2 NVME onboard SSD; 1 TB M.2 NVME onboard SSD; 512 GB M.2 NVME onboard SSD with 1* 512 GB M.2 NVME on 1 exchangeable SSD slider; 512 GB M.2 NVME onboard SSD with 1* 1 TB M.2 NVME on 1 exchangeable SSD slider; RAID1 2* 512 GB M.2 NVME on 2 exchangeable SSD slider; RAID1 2* 1 TB M.2 NVME on 2 exchangeable SSD slider; 512 GB M.2 NVME onboard SSD with RAID1 2* 512 GB M.2 NVME on 2 exchangeable SSD slider
Memory	
Type of memory	DDR5-4800 SO-DIMM
Main memory	8 / 16 / 32 / 64 GB; ECC optional
Capacity of main memory, max.	64 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
Interfaces	
Number of industrial Ethernet interfaces	4; 4x Gigabit Ethernet (RJ45)
serial interface	2x / 4x (optional) COM (RS 232 / 485 / 422; selectable)
Video interfaces	
<ul style="list-style-type: none"> Graphics interface 	2x DisplayPort
Industrial Ethernet	
<ul style="list-style-type: none"> Industrial Ethernet interface <ul style="list-style-type: none"> 100 Mbps 1000 Mbps 	<ul style="list-style-type: none"> Yes Yes

Integrated Functions					
Monitoring functions					
• Temperature monitoring	Yes				
• Fan	Yes				
• Monitoring function via network	Optional				
Degree and class of protection					
IP degree of protection	IP20 with fan or extension modules, IP40 without fan				
Standards, approvals, certificates					
Siemens Eco Profile (SEP)	Siemens EcoTech				
CE mark	Yes; also UKCA				
cULus	Yes				
RCM (formerly C-TICK)	Yes				
FCC	Yes				
BIS	Yes; 400 W DC power supply configuration only (base module, base module + extension module 1/2 slot)				
Ecological footprint					
• environmental product declaration	Yes				
Global warming potential					
— global warming potential, (total) [CO2 eq]	1 480 kg				
— global warming potential, (during production) [CO2 eq]	113 kg				
— global warming potential, (during operation) [CO2 eq]	1 380 kg				
— global warming potential, (after end of life cycle) [CO2 eq]	-16.9 kg				
Ambient conditions					
Ambient temperature during operation					
• min.	0 °C				
• max.	55 °C; base module only: 40 °C at fanless and 2.5" non power loss protection SSD configuration; 50 °C at fanless and M.2 SSD configuration; with extension module: 40 °C				
Ambient temperature during storage/transportation					
• min.	-20 °C				
• max.	60 °C				
Vibrations					
• Vibration resistance during operation acc. to IEC 60068-2-6	tested in accordance with IEC 60068-2-6; operation - base module (5 to 8.4 Hz: 3.5 mm; 8.4 to 200 Hz: 9.8 m/s ²); extension module w/o storages (10 to 58 Hz: 0.0375 mm; 58 to 200 Hz: 4.9 m/s ²); extension module with SSD (10 to 58 Hz: 0.0375 mm; 58 to 200 Hz: 4.9 m/s ²); storage / transport - 5 to 8.4 Hz: 3.5 mm; 8.4 to 500 Hz: 9.8 m/s ²				
Operating systems					
without operating system	Yes; Optional				
pre-installed operating system					
• Windows 10 Enterprise	Yes; Windows 10 Enterprise 2021 LTSC 64-bit, MUI				
• Windows 11	Yes				
Dimensions					
Width	79 mm				
Height	194 mm				
Depth	237 mm				
Approvals / Certificates					
General Product Approval					
			Miscellaneous	China RoHS	
General Product Approval		Environment			



last modified:

1/16/2026 