ideacentre 510A 90J0000BGE

Region
WE

Country
Germany

Machine Type
90J0

Processor
AMD Ryzen 3 2200G (4C, 3.5 / 3.7GHz, 2MB)

Graphics
Integrated AMD Radeon Vega 8 Graphics

Chipset
AMD B300

Memory
4GBx2 DDR4-2666

Storage
1TB 7200rpm 3.5"

Optical
DVD±RW

Media Reader
7-in-1

WLAN + Bluetooth
11ac, 1x1 + BT4.0

Keyboard / Mouse
USB Black / USB Black

System Fan
One Rear

Power Supply
180W Energy Star

Operating System
Windows 10 Home 64

Warranty
2-year, Depot

Ann Date (mm/yy)
04/18

Note:
Country Code "US" is for United States, "++" is for EMEA countries (e.g. AD - Saudi, Arabia, AT - Austria, BM - Bulgaria, etc.), "xx" is for EAST countries (e.g. BM - Bulgaria, CX - Hungary, CY - Cyprus, etc.), and "**" is for MEA countries (e.g. AD - Saudi, Arabia, ED - Egypt, EQ - Sweden, etc.). Please be aware that the EMEA/ EAST/MEA models listed above might not be available in all countries

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ideacentre 510A Intel Platform Specifications

Processor	Intel® Pentium® Processor or 7th Generation Intel Core™ i3 / i5 / i7 Processors

Processor	Cores / Threads	Frequency (Base/Max)	Cache	Memory Type	Integrated Graphics
Pentium G4560	2 / 4	3.5 GHz	3 MB	DDR4-2400	Intel HD Graphics 610
Core i3-7100	2 / 4	3.9 GHz	3 MB		Intel HD Graphics 630
Core i5-7400	4 / 4	3.0 GHz / 3.5 GHz	6 MB		
Core i7-7700	4 / 8	3.6 GHz / 4.2 GHz	8 MB		

Memory	32GB max, 2400MHz DDR4, two sockets, dual-channel capable
Storage	*Some:* SATA 6.0Gb/s, 3.5" wide, 7200 rpm *Some:* M.2 Solid State Drive (SSD) / PCIe NVMe, PCIe 3.0 x4, 32Gb/s *Some:* Intel Optane™ Memory, PCIe NVMe, PCIe 3.0 x2, 16Gb/s, M.2 * 128GB SSD M.2 (2242) PCIe NVMe only supports PCIe 3.0 x 2, 16Gb/s
Optical *(opt)*	DVD±RW, SATA 1.5Gb/s, slim
Onboard SATA	SATA 6.0Gb/s controller, three SATA 6.0Gb/s connectors
Media reader	*Opitonal* 7-in-1 media reader (SD, SDHC, SDXC, MMC, MS, MS-Pro, MMC plus)
Graphics	Intel HD Graphics 610 or 630 in processor, uses main memory, DirectX 12, one VGA, one HDMI 1920x1080@30Hz (HDMI); 1920x1200@60Hz (VGA)
Chipset	Intel B250 Chipset
Front ports	One headphone / microphone combo jack (3.5mm), four USB 3.1 Gen1, one microphone (3.5mm), optional media reader
Rear ports	Two USB 2.0, two USB 3.1 Gen1, ethernet (RJ-45), one VGA, one HDMI
Rear audio ports	Line-in (3.5mm), line-out (3.5mm), microphone-in (3.5mm)
IEEE 1394	None
Audio support	High Definition (HD) Audio, Realtek ALC662
WLAN	11ac, M.2 Card, Wi-Fi + Bluetooth combo adapter, 1x1
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter
Ethernet	One gigabit ethernet port
Modem	None
Security features	● Power-on password ● Administrator password ● Hard-disk password
Keyboard	Lenovo Calliope Keyboard (USB connector), Fn keys, black
Mouse	Lenovo Calliope Mouse (USB connector), black
Mechanical	● Tower (15L), black color ● Dimensions (WxDxH): 5.71" x 11.22" x 14.41"; 145mm x 285.2mm x 366.03mm ● Weights (net weight): *IKL:* 12.8 lb (5.8 kg); *Others:* 15.1 lb (6.85 kg) ● Optional front and rear system fan Bay 1: 9.0mm for slim optical Bay 2: 3.5", disk Bay 3: 3.5" or 2.5", disk Slot 1: full-length half-height, PCIe 3.0 x16 Slot 2: full-length half-height, PCIe 3.0 x1 M.2 card slots: one for WLAN, one for M.2 SSD / Optane
Power supply	*Some:* 180 watts, autosensing, 85% PSU, EnergyStar 6.1, universal (110V-220V) *Some:* 210 watts, autosensing, 85% PSU, EnergyStar 6.1, universal (110V-220V)
Limited warranty	1-year or 2-year, depot repair service / service upgrades available
Preload	Preloaded operating system Windows® 10 Home 64 Preloaded applications (only some listed) ● Microsoft Office preloaded; purchase a product key to activate ● Lenovo® Application Explorer ● Lenovo PC Manager ● McAfee® LiveSafe™ (30-day trial) ● PowerDVD (DVD±RW) ● Power2GO (DVD±RW)
Environment	ENERGY STAR® 6.1 (support version 7.0 after November); ErP Lot 3; RoHS-compliant

ideacentre 510A Platform Specifications

Processor

ABR: AMD A series APUs

Processor	Cores	Frequency (Base/Max)	Cache	Memory Type	Integrated Graphics
A6-9500	2	3.5 GHz / 3.8 GHz	1 MB	DDR4-2400	Radeon™ R5
A8-9600	4	3.1 GHz / 3.4 GHz	2 MB		Radeon R7
A10-9700	4	3.5 GHz / 3.8 GHz	2 MB		
A12-9800	4	3.8 GHz / 4.2 GHz	2 MB		

ARR: AMD Ryzen™ 3 / 5 series processor

Processor	Cores / Threads	Frequency (Base/Max)	Cache	Memory Type	Integrated Graphics
Ryzen 3 2200G	4 / 4	3.5 GHz / 3.7 GHz	2 MB	DDR4-2666	Radeon Vega 8 Graphics
Ryzen 5 2400G	4 / 8	3.6 GHz / 3.9 GHz			Radeon RX Vega 11 Graphics

Memory

ARR: 32GB max, 2666MHz DDR4, two sockets, dual-channel capable
ABR: 32GB max, 2400MHz DDR4, two sockets, dual-channel capable

Storage

Some: SATA 6.0Gb/s, 3.5" wide, 7200 rpm
Some: M.2 Solid State Drive (SSD) / PCIe NVMe, PCIe 3.0 x2, 16Gb/s

Optical *(opt)* DVD±RW, SATA 1.5Gb/s, slim
Onboard SATA SATA 6.0Gb/s controller, two SATA 6.0Gb/s connectors
Media reader *Opitonal* 7-in-1 media reader (SD, SDHC, SDXC, MMC, MS, MS-Pro, MMC plus)

Graphics

Some: AMD Radeon R5 or R7 Graphics in processor, uses main memory, DirectX 12, one VGA, one HDMI
Max resolution: 4096x2160@24Hz (HDMI); 3840x2160@60Hz (VGA)
Some: AMD Radeon Vega 8 or RX Vega 11 Graphics in processor, uses main memory, DirectX 12,
Max resolution: 4096x2160@24Hz (HDMI); 3840x2160@60Hz (VGA)
Some: **AMD Radeon RX 550**, **2GB GDDR5**, DirectX 12, one HDMI, one DVI, one DP;
Max resolution: 4096x2160 (HDMI)@60Hz; 5120x2880 (DP)@60Hz; 2048x1536 (VGA)@60Hz
Some: **AMD Radeon RX 560**, **4GB GDDR5**, DirectX 12, one HDMI, one DVI, one DP;
Max resolution: 4096x2160 (HDMI)@60Hz; 5120x2880 (DP)@60Hz; 2560x1600 (DVI)@60Hz

Chipset

AMD B300 Chipset

Front ports

One headphone / microphone combo jack (3.5mm), two USB 3.1 Gen1, one microphone (3.5mm), optional media reader, two USB 2.0

Rear ports Two USB 2.0, ethernet (RJ-45), VGA, HDMI (1.4)
Rear audio ports Line-in (3.5mm), line-out (3.5mm), microphone-in (3.5mm)
IEEE 1394 None

Audio support

High Definition (HD) Audio, Realtek ALC662

WLAN

11ac, M.2 Card, Wi-Fi + Bluetooth combo adapter, 1x1
Bluetooth™ Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter
Ethernet One gigabit ethernet port
Modem None

Security features

- Power-on password
- Administrator password
- Hard-disk password

Keyboard

Lenovo Calliope Keyboard (USB connector), Fn keys, black
Mouse Lenovo Calliope Mouse (USB connector), black

Mechanical

- Tower (15L), black color
- Dimensions (WxDxH): 5.71" x 11.22" x 14.41"; 145mm x 285.2mm x 366.03mm
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- Optional front and rear system fan

Bay 1: 9.0mm for slim optical
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Slot 1: full-length half-height, PCIe 3.0 x16
Slot 2: full-length half-height, PCIe 3.0 x1
M.2 card slots: one for WLAN, one for M.2 SSD

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Some: 180 watts, autosensing, 85% PSU, EnergyStar 6.1, universal (110V-220V)
Some: 210 watts, autosensing, 85% PSU, EnergyStar 6.1, universal (110V-220V)

Limited warranty

1-year or 2-year, depot repair service / service upgrades available

Preload

Preloaded operating system
Windows® 10 Home 64
Preloaded applications (only some listed)

- Microsoft Office preloaded; purchase a product key to activate
- Lenovo® Application Explorer
- Lenovo PC Manager
- McAfee® LiveSafe™ (30-day trial)
- PowerDVD (DVD±RW)
- Power2GO (DVD±RW)

Environment

ENERGY STAR® 6.1 (support version 7.0 after November); ErP Lot 3; RoHS-compliant

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