Fanless 19.5" All-in-One PC for POS, POI and Kiosk Applications

The XPC all-in-one P9000XA fully configured All-in-One PC (without operation system) with capacitive 19.5" touchscreen. An Intel Ultra-Low-Voltage (ULV) processor makes for high computing power while it keeps energy consumption at a low level. Thanks to its passive cooling, the system is virtually noiseless, maintenance-free and approved for 24/7 nonstop operation. Particularly suitable for vertical applications is the arrangement of connectors at the bottom and the IP54 compliant front panel which is dust-protected and protected from splashing of water.

Feature Highlights • XPC all-in-one with touchscreen Dimensions: 487 x 321 x 44 mm (WHD) All-in-One • 100 mm VESA mount capable Design • IP54 compliant front panel Approved for 24/7 nonstop operation • 49.5 cm (19.5") LC Display, 1600 x 900 pixel • Capacitive 10-point multi-touchscreen Display & **Graphics** • Integrated Intel HD 610 graphics • HDMI 1.4 + D-Sub/VGA Video output CPU & Intel Celeron 3865U, 1.8 GHz, 15 W TDP Cooling • Fanless heatpipe cooling system • 4 GB DDR4 SO-DIMM memory RAM & • 500 GB hard disk in 2.5 format Storage • Supports one M.2-2280 SSD (SATA / PCIe) • Supports internal USB stick (USB 2.0, type A) Operating · Operating system is not included System • Supports Windows 10 (64-bit) & Linux (64-bit) • HDMI 1.4. D-Sub/VGA 2x USB 3.0, 4x USB 2.0, internal port: 1x USB 2.0 Connectivity • Microphone input, headphones output • Gigabit LAN, Wireless LAN 802.11ac, BT 4.1 • SD card reader, 2.0 Megapixel FHD webcam Built-in 2x 2 W speakers • Electret Condenser Microphone • External fanless power adapter, 65 W / 19 V Power Supply DC-in supports 12 V and 19 V voltage Warranty • 36 months (2 years Pick-up + 1 year Bring-in)

Images for illustration purposes only.

XPC all-in-one System P9000XA Black With 4 GB RAM and 500 GB HDD







19.5"
Multitouch



Nonstop operating



Fanless cooling



Front protected: dust & water



4 GB RAM 500 GB HDD



Supports Windows 10 & Linux (64-bit)



WLAN-AC and Intel LAN



2x USB 3.0 4x USB 2.0



Internal USB-Port



Shuttle XPC all-in-one P9000XA - Overview



- 1 Stand
- 1a Stand mounting plate
- 1b VESA cover
- 1c 100 x 100 mm VESA mount
- 2 Full HD Webcam
- 3 Microphone
- 4 Touchscreen LCD display
- 5 Power Button
- 6 2x Performation for external antenna
- 7 Hole for hidden power button

- 8 SD card reader
- **9** 4x USB 2.0 port
- 10 Power LED
- 11 Hard disk LED
- 12 2x speakers (stereo)
- 13 Position of optional NFC
- 14 Name plate (rating label)15 Hole for Kensington lock
- 15 Hole for Kensington lock16 D-Sub/VGA video output
- 17 LPT Parallel Port (optional)

- 8 2x D-Sub COM port (optional)
- 19 2x RJ45 COM port (optional)
- 20 RJ11 for cash drawer (opt.)
- 21 DC-input for power adapter
- 22 RJ45 Gigabit LAN port
- 23 2x USB 3.0
- 24 HDMI video output
- 25 Audio Line-out (headphones)
- 26 Microphone input
- 27 Openings for ventilation

Shuttle XPC all-in-one P9000XA – Special Features



All applications at your fingertips - 10-point multi-touch

The innovative touchscreen technology delivers the simplest operation possible and makes the screen the centre of action. Its high-quality design gives you access to all capabilities of the PC - by just touching the screen.

24/7 nonstop operation

The Shuttle XPC all-in-one P9000XA is officially approved for 24/7 permanent operation. Thanks to its low power consumption and completely passive cooling, this PC runs highly reliable making it perfectly suitable for digital signage and POI/POS applications.

Conditions for permanent use:

- Ambient temperature while under load: 5 40 °C
- Air humidity while under load: 10 80 % (not condensing)
- Free circulation of air amongst the PC must be guaranteed
- · Ventilation holes must be kept clear
- If a hard disk is installed, this must also be approved for permanent operation by its manufacturer.



Fanless and quiet

The Shuttle XPC all-in-one P9000XA uses a passive thermal module to lead heat out of the case quickly and evenly. The unique fanless design makes it perfect to be used in noise-sensitive environments. As an additional benefit, fanless cases rarely gather dust on the inside and stay cleaner than others. So it's not only quiet and low in energy use, but also virtually maintenance-free.



Protection Class IP54

The front panel of the Shuttle XPC all-in-one P9000XA is dust-protected and protected from splashing of water according to IP protection class 54. Consequently, this All-in-One PC can be used for those indoor applications, where the touchscreen may be exposed to humidity and occasional splashing of water. This is particularly welcome in restaurants, laboratories, production or other places.



Optimised Cable Management

Most of the connectors are now located at the back panel facing down. This leads to an effective cable management making for a clean, tidy appearance on the desk.

On the left side sit those connectors which need to be accessed from the front: the card reader and two USB ports.



Connects to two external Full HD displays

The Shuttle XPC all-in-one P9000XA features two video outputs: One analog D-Sub/VGA connector and one HDMI connector. Two separate Full HD displays can be connected in extended mode. Now add the built-in display of the P9000XA and there are three displays showing different content.

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Power on after Power fail

The BIOS setup provides a "Power-On-after-Power-Fail" function that can be found under "Power Management Configuration" where the PC's behaviour after power failure can be determined.

The Shuttle XPC all-in-one P9000XA also comes with a hardware-based solution. By removing Jumper 7, the system will start unconditionally once power is applied.





Hidden Power Button

<u>Left picture:</u> The power button can be deactivated to prevent unauthorised use. To do so, disconnect the appropriate connection inside the chassis (see red circle).

<u>Right picture:</u> Still, it can be used with a straightened paper clip as shown on the left.



VESA mount *)

The stand on the rear can easily be removed to unveil four VESA mounting screw holes that can be used for mounting arms and other mounting devices from a variety of manufacturers.

*) VESA mount is not included



Shuttle XPC all-in-one P9000XA – Specifications					
Fanless and silent	Passive heatpipe cooling, absolutely no fan noise Perfect for noise-sensitive environments Fanless, dust-free and thus virtually maintenance-free				
24/7 nonstop operation	This device is approved for 24/7 permanent operation. Requirements: - Free circulation of air amongst the PC must be guaranteed. - Ventilation holes must be kept clear. - If a hard disk is installed, this must also be approved for permanent operation by its manufacturer.				
IP54 protection	The front panel is dust-protected and protected from splashing of water according to protection class IP54.				
Chassis	Colour: black Dimensions: 487 x 321 x 44 mm (W x H x D) 100 mm VESA mountable Hole for Kensington lock Weight: 4.29 kg net, 5.62 kg gross				
Operating system	This system comes without operating system. It is compatible with: - Windows 10 - 64-bit - Linux - 64-bit				
Touchscreen	Touchscreen function supports fingertip input Capacitive Touch Panel with 10-point multi-touch Supports input with gloves (PVC, cotton, cotton/linen) Stylus pen not supported				
49.5 cm display (19.5")	49.5 cm / 19.5" LCD display Ratio: 16:9 widescreen panel Resolution: 1600 x 900 = 1.44 Megapixel (WSXGA/HD+)				
Processor	Model: Intel Celeron 3865U (ULV) System-on-a-chip architecture (SoC): no chipset required BGA1356 package soldered on the mainboard Code name: Kaby Lake-U (7th Generation Intel Core) Cores / Threads: 2 / 2 Clock rate: 1.8 GHz L1/L2/L3 Cache: 128 kB / 512 kB / 2048 kB Memory controller: DDR4-2133 Dual Channel (1.2 V) TDP wattage: 15 W maximum Manufacturing process: 14 nm Maximum Tjunction Temperature: 100 °C Supports 64-bit, VT-x (EPT), VT-d, Enhanced SpeedStep, NX bit, AES-NI, SSE 4.1/4.2 Integrated graphics engine				



Integrated Graphics	Intel HD Graphics 610 GPU clock frequency: 300~900 MHz Execution Units (EUs): 12 Supports DirectX 12 Supports full H264, H265 8/10 bit, VP8/9, VC-1, AVC hardware decoding Supports Quick Sync Video and Clear Video HD technology				
Up to three displays	Two video ports support two additional independent screens: 1) HDMI 1.4b supports 1920 x 1080 @ 60 Hz or 3840 x 2160 @ 30 Hz 2) VGA / D-Sub analog video supports 1920 x 1080 @ 60 Hz Multi-Monitoring modes as follows: Clone mode: All displays show the same content at 1600 x 900. Extended mode: All displays show different content.				
BIOS	AMI BIOS in 8 MByte EEPROM with SPI interface Supports Power-on-after-power-fail / always on Supports Wake-on-LAN (WOL) from \$3, \$4, \$5 ACPI states Supports hardware monitoring and Watchdog function Supports Firmware TPM v2.0 function				
Memory	4 GB DDR4 SO-DIMM memory with 260 pins Supports a maximum of 16 GB DDR4-2133 (PC4-17000) SDRAM per DIMM slot, maximum total size: 32 GB				
HDD storage	500 GB hard disk drive in 2.5" format with SATA interface				
M.2-2280 Slot	The M.2 2280 BM slot provides the following interfaces: - PCI-Express Gen. 3.0 X4 with up to 32 Gbps of data transfer speed - SATA v3.0 (max. 6 Gbps) It supports M.2 cards with a width of 22 mm and a length of 42, 60 or 80 mm (type 2242, 2260, 2280). Supports M.2 SATA SSDs (with B+M key) and M.2 PCIe SSDs (with M key)				
Card Reader	Integrated card reader supports SD, SDHC and SDXC memory flash cards				
Webcam	Integrated Full HD webcam (1920 x 1080 pixels)				
Microphone and speakers	Front panel with integrated Electret Condenser Microphone and 2x 2 W speakers				
Integrated Audio	Realtek ALC269 Audio Codec Two analog audio connectors (3.5 mm) on the bottom side: 1) Line-out (headphones) 2) Microphone input Digital Audio is supported via HDMI.				



Wired Network	Intel i211 Ethernet Controller with MAC, PHY and PCIe interface Supports 10 / 100 / 1.000 MBit/s operation Supports WAKE ON LAN (WOL) from \$3, \$4 modes Supports network boot by Preboot eXecution Environment (PXE)				
Wireless Network (WLAN)	Model: AzureWave AW-CB209NF Chipset: Realtek RTL8821AE M.2-2230 (NGFF) extension card Connected with two internal antennas (via IPEX4) Supports WiFi IEEE 802.11b/g/n/ac in the 2.4/5 GHz band, 1T1R Max. 72.2 / 150 Mbps using 20 / 40 MHz bandwidth in n-mode Max. 433.3 Mbps using 80 MHz bandwidth in ac-mode Supports Bluetooth 4.1 in the 2.4 GHz band (BT 4.0 under Linux)				
Front LEDs	Power LED (blue) Hard disk LED (orange)				
Connectors left side	Power button 2x USB 2.0 SD card reader Hole with power button Perforation for optional WLAN/LTE antenna (diameter: 7 mm)				
Connectors bottom side	HDMI 1.4b (supports digital video and digital audio) 2x USB 3.0 2x USB 2.0 Gigabit Network (LAN, RJ45) Audio Line-out / headphones (3.5 mm jack) Microphone input (3.5 mm jack) DC input for external power adapter (5.5 / 2.5 mm) Perforation for optional WLAN/LTE antenna (diameter: 7 mm)				
Connectors rear side	VGA connector (D-Sub 15 pol., analog video) 2x COM/serial (D-Sub) 1x LPT/parallel				
Connectors onboard	Internal USB 2.0 type A connector for a USB stick Serial ATA (6 Gbps) Serial ATA power connector 3x USB 2.0 header (all occupied) eDP connector (Embedded DisplayPort) - occupied by the display				
Openings for optional antennas	The chassis features two perforated 7 mm holes for optional antennas mounted with an (RP-)SMA connector for wireless network such as WLAN or WWAN (e.g. LTE)				
Power adapter	External 65 W power adapter (fanless) Input: 100~240 V AC, 50/60 Hz, max. 1.6 A Output: 19 V DC, max. 3.42 A, max. 65 W				



DC Input connector	DC Input Connector: 5.5 / 2.5 mm (outer/inner diameter) The DC-input of the computer supports an external power source with either $12V\pm5\%$ or $19V\pm5\%$.			
Included Accessories	Quick Guide Driver DVD External Power Adapter (65W / 19V) Power cord Screws			
Optional Accessories	PCL71: COM / LPT / RJ11 adapter: - 1x Parallel (25p D-Sub) - 2x Serial RS232 (9p D-Sub) supports 0 / 5 / 12V POS01: COM / LPT / RJ11 adapter: - 1x Parallel (25p D-Sub) - 2x Serial RS232 (9p D-Sub) supports 0 / 5 / 12V - 2x Serial RS232 (8p RJ45) - 1x DIO/RJ11 connector for cash drawer supports 12 / 24V PNFC02: NFC module (no Linux and transaction support) - Note: PNFC02 is only available on request			
Environmental criteria	Operating temperature: 0~40 °C Humidity: 10~90 %			
Certification and Compliance	EMI: CE, RED, FCC, RCM, VCCI Safety: CB, ETL Other compliances: RoHS, ErP Lot3, Energy Star v7.0			
Conformity	This device is classed as a technical information equipment (ITE) in class B and is intended for use in living room and office. The CE-mark approves the conformity by the EU directives: (1) 2014/30/EU relating to electromagnetic compatibility (EMC), (2) 2014/35/EU relating to Electrical Equipment designed for use within certain voltage limits (LVD), (3) 2009/125/EU relating to ecodesign requirements for energy-related products (ErP), (4) 2014/53/EU related to Radio and Telecommunications Terminal Equipment (RED)			



Shuttle XPC all-in-one Barebones – Comparison

Note: P9000XA is a fully configured PC system without operating system, which is based on the Barebone P90U.

Touch Display	Model	Processor	Colour	UPC Code
11.6" 1366 x 768 pixels Capacitive	P20U	Intel Celeron 3865U	Black	887993001487
15.6"	X50V6	Intel Celeron 3865U	Black	887993001203
1366 x 768 pixels			White	887993001227
Resistive	X50V6U3	Intel Core i3-7100U	Black	887993001074
Resistive			White	887993001098
15.6"	P51U	Intel Celeron 4205U	Black	887993001791
1920 x 1080 pixels Capacitive	P51U3	Intel Core i3-8145U	Black	887993002187
	P90U	Intel Celeron 3865U	Black	887993001661
19.5"			White	887993001890
1600 x 900 pixels	P90U3	Intel Core i3-7100U	Black	887993001685
Capacitive			White	887993001906
	P90U5	Intel Core i5-7200U	Black	887993001678

P20U (11.6")



P51U (15.6")



X50V6 (15.6")



P90U (19.5")

