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SYSTEM
XPC all-in-one
POS P920 Black

P92U, 4 GB RAM, 128 GB SSD, 2x COM, no OS

19.5" ALL-IN-ONE PC FOR POS APPLICATIONS

The Shuttle POS P920 is a 19.5 inch All-in-One POS Terminal PC with a capacitive touchscreen. It is equipped with Intel Celeron® ULV Processor, 128 GB SSD and 4 GB RAM. This system is suitable for small and medium retailers to serve customers effectively. It offers numerous connectors for typical POS peripherals - two COM ports are also available. In addition, the HDMI and VGA ports can be used to drive two more displays with basic digital signage applications. Thanks to its passive cooling, the system is virtually noiseless, maintenance-free and is approved for 24/7 nonstop operation. Particularly suitable for POS 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. POS P900 offers a high level of reliability and is a lower priced alternative to conventional POS systems.

Software is not included

CAPACITIVE MULTI TOUCH	4 GB DDR4 RAM	128 GB NVMe SSD	2.5" BAY	HDMI VGA	2x COM 1x Parallel	INTEL LAN	Wi-Fi 5 BT 4.2	VESA MOUNT	IP54	Max. 40 °C	24/7 SUPPORT

COMMON FEATURES
- IP54 compliant front panel ■ Dimensions: 487 x 321 x 44 mm (WHD)
- Supports 24/7 Nonstop Operation ■ 100 mm VESA mount capable
- Operating temperature: 0~40 °C ■ Fanless heatpipe cooling system

DISPLAY & GRAPHICS
- 49.5 cm (19.5") LC Display, 1600 x 900 pixel ■ Capacitive 10-point multi-touch ■ Integrated Intel UHD 610 graphics ■ HDMI 1.4 & VGA

OPERATING SYSTEM
- An operating system is not included
- Supports Windows 10/11 (64-bit) and Linux (64-bit)

PROCESSOR
- Intel Celeron 5205U "Comet Lake-U" Dual Core, TDP: 15W

STORAGE
- 4 GB DDR4 SO-DIMM ■ 128 GB M.2-2280 SSD (PCIe/NVMe)
- Supports one 2.5" SATA hard disk / SSD
- Supports internal USB stick (USB 2.0, type A)

CONNECTIVITY
- HDMI 1.4 ■ D-Sub/VGA ■ 4x USB 3.2 Gen 1 ■ 2x USB 2.0 ■ internal: 1x USB 2.0 (Type A) ■ 2x Audio (Mic & headphones) ■ Gigabit LAN (Intel) ■ 2x COM-Port (D-Sub) ■ 1x Parallel port (LPT)

BUILT-IN
- SD card reader ■ 2.0 Megapixel FHD webcam ■ 2x 2 W speakers
- Electret Condenser Microphone ■ Wireless LAN 802.11ac, BT 4.2

POWER SUPPLY
- External 65W / 19V power adapter

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FIXED CONFIGURATIONS OF THE P92U SERIES

Product	Type	Intel ULV CPU	RAM	M.2 SSD	Accessory	OS	Bar Code
P92U	Barebone	Celeron 5205U	–	–	–	–	Black: 887993003191 (UPC) White: 887993003764 (UPC)
P9200XA	System without OS	Celeron 5205U	8 GB	500 GB NVMe	–	–	Black: 4046047103713 (EAN)
P9200PA	System with OS	Celeron 5205U	8 GB	250 GB NVMe	–	Win 10 IoT	Black: 4046047103706 (EAN)
POS P920	System without OS	Celeron 5205U	4 GB	128 GB NVMe	PCL71 (2x COM, LPT)	–	Black: 4046047103720 (EAN)

PRODUCT 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 POS P920 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.

Fanless and quiet

The Shuttle XPC all-in-one POS P920 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 POS P920 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.

Two RS-232 serial port

Many PCs do not have these legacy ports any longer, since they have been superseded and replaced by USB for most consumer applications, but they are still commonly used for POS systems and other such fields of application. This system features two serial RS-232 port which also supports both 5 and 12 V auxiliary voltage. A parallel port is also included.

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 POS P920 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 POS P920 and there are three displays showing different content.

Hidden Power Button

The power button can be deactivated to prevent unauthorised use. To do so, disconnect the appropriate connection (SW2302) inside the chassis. Still, it can be used with a straightened paper clip as shown on the left (see photo).

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

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Front and Back Panel

Right Side

Front View

Left Side

Back panel

Bottom

optional

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

8. SD card reader
9. 4x USB 3.2 Gen 1 (5 Gbps)
10. Power LED
11. Hard disk LED
12. 2x speakers (stereo)
13. Name plate (rating label)
14. Hole for Kensington lock
15. D-Sub/VGA video output
16. LPT Parallel Port
17. 2x D-Sub COM port

18. DC-input for power adapter
19. 2x USB 2.0
20. RJ45 Gigabit LAN port
21. HDMI video output
22. Audio Line-out (headphones)
23. Microphone input
24. Openings for ventilation

SHUTTLE XPC all-in-one POS P920 — 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 PROTECTED	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 11 - 64-bit - 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
19.5" DISPLAY	49.5 cm / 19.5" LCD display Ratio: 16:9 wide-screen panel Resolution: 1600 x 900 = 1.44 Megapixel (WSXGA/HD+)
PROCESSOR	Model: Intel Celeron 5205U (ULV) System-on-a-chip architecture (SoC): no chipset required FCBGA1528 package - directly soldered onto the mainboard Code name: Comet Lake-U (10th Generation Intel Core) Cores / Threads: 2 / 2 Clock rate: 1.9 GHz L1/L2/L3 Cache: 256 kB / 1 MB / 2 MB Memory controller: DDR4-2400 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	Intel UHD 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
SUPPORTS TRIPLE DISPLAY	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 follow: 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 S3, S4, S5 ACPI states Supports hardware monitoring and Watchdog function Supports Firmware TPM v2.0 function
MEMORY	4 GB DDR4 SO-DIMM memory Supports a maximum of 32 GB per DIMM, maximum total size: 64 GB

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2.5" BAY FOR HDD/SSD	Supports one SATA hard disk or one SATA SSD drive in 6.35 cm / 2.5" format The SATA 3.0 interface supports up to 600 MB/s of data transfer speed (6 Gbit/s) Supports one drive with up to 12.5 mm in height SATA cable pre-installed
M.2-2280M SSD SLOT	128 GB SSD module in M.2-2280 format Supports PCIe interface and NVMe mode
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	C-Media CM6542 (USB) or Realtek ALC269 (HD Audio) Two analog audio connectors (3.5 mm) on the bottom side: 1) Line-out (head-phones) 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 S3, S4 modes Supports network boot by Preboot eXecution Environment (PXE)
WIRELESS NETWORK (WLAN)	Chipset: Realtek RTL8821CE-CG 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 4.2 in the 2.4 GHz band
FRONT LEDs	Power LED (blue) Hard disk LED (orange)
CONNECTORS LEFT SIDE	Power button 2x USB 3.2 Gen 1 (max. 5 Gbps) 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 3.2 Gen 1 (max. 5 Gbps) 2x USB 2.0 Gigabit Network (LAN, RJ45) Audio Line-out / head-phones (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 (Overall length of the USB stick: 100 mm) Serial ATA (6 Gbps) Serial ATA power connector 3x USB 2.0 header (all occupied) eDP connector (Embedded DisplayPort) - occupied by the display Connector for optional COM/LPT adapter POS01 or PCL71
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 ±5 % or 19V ± 5%.

SUPPLIED ACCESSORIES	Quick Guide Driver DVD External Power Adapter (65W / 19V) Power cord Screws
ENVIRONMENTAL SPECIFICATIONS	Operating temperature: 0~40 °C Humidity: 10~90 %
CERTIFICATIONS / 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)