Fanless All-in-one PC for POS

The Shuttle POS X5050PA is a valued All-in-One POS Terminal PC boasting a 15.6-inch touchscreen and **Windows Embedded POSReady 7** operating system. It is equipped with Intel Celeron® ULV Processor, 120 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 X5050PA offers a high level of reliability and is a lower priced alternative to conventional POS systems.

Feature Highlights

All-in-One Design	• XPC all-in-one with touchscreen • Small: 391 x 327 x 42 mm (WHL) • Stand can also be used as a handle • 100mm VESA mount capable • IP54 compliant front panel • Approved for 24/7 nonstop operation
Display & Graphics	• 39.6cm (15.6") resistive touchscreen with a 1366x768 resolution • Integrated Intel HD graphics • HDMI 1.4 + D-Sub/VGA Video output
CPU & Cooling	• Intel Celeron 3855U, 1.6 GHz, 15W TDP • Fanless heatpipe cooling system
RAM & Storage	• 4 GB DDR3L-1600 SO-DIMM (max. 16 GB) • 120 GB 2.5" SATA SSD • Supports one M.2-2280 SSD (SATA / PCIe) • Supports internal USB stick (USB 2.0, type A)
Operating System	• Windows Embedded POSReady 7 - 64 Bit
Connectivity	• HDMI 1.4, D-Sub/VGA • 2x USB 3.0, 4x USB 2.0, internal: 2x USB 2.0 • Microphone input, headphones output • Gigabit LAN, Wireless LAN 802.11n • 2x Serial COM (RS232), 1x Parallel (LPT)
Built-in	• SD card reader • 2.0 Megapixel HD webcam • 2x 2W speakers • Electret Condenser Microphone
Power Supply	• External fanless power adapter, 65W
Warranty	• 24 months Pick-up-and-Return Service (PUR)

XPC all-in-one PC System

POS X5050PA

White



Images for illustration purposes only.



Windows Embedded POSReady 7



Nonstop operating



Fanless cooling



15.6" Touchscreen



Front protected: dust & water



HDM + VGA Video Ports



Celeron 3855U processor



120 GB 2.5" SSD



4 GB RAM



Wireless and Wired Network



2x USB 3.0 4x USB 2.0



2x COM 1x Parallel

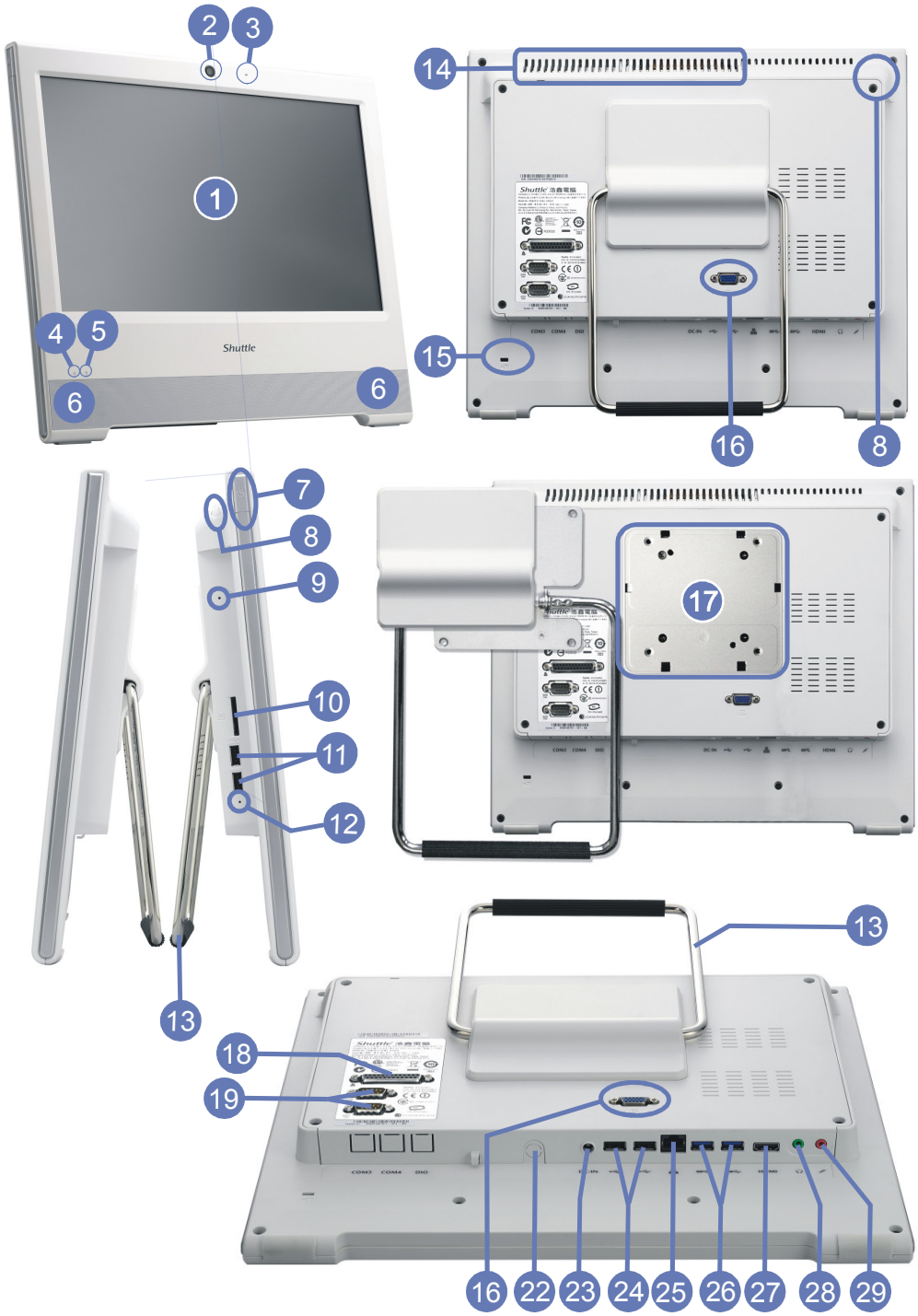
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Shuttle XPC all-in-one POS X5050PA – Overview



1	Touchscreen LCD display	**10**	SD Card Reader	**19**	2x COM (D-Sub, RS232)
2	Webcam	**11**	2x USB 2.0	**22**	Perforation for TV antenna (9 mm)
3	Microphone	**12**	Clear CMOS Button	**23**	DC-input for Power Adapter
4	Power on LED	**13**	Stand (handle)	**24**	2x USB 2.0
5	Hard disk LED	**14**	Cooling Vents	**25**	RJ45 Gigabit LAN
6	Stereo speakers	**15**	Kensington lock	**26**	2x USB 3.0
7	Power-on button	**16**	D-Sub/VGA Video Output	**27**	HDMI Video Output
8	Stylus with holder	**17**	Vesa Mount 100x100mm	**28**	Audio Line-out (headphones)
9	Power Button	**18**	Parallel Port (LPT)	**29**	Microphone Input

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Shuttle XPC all-in-one POS X5050PA – Special Features



All applications at your fingertips

The innovative touchscreen technology delivers the simplest operation possible and makes the screen the centre of action. Have any applications start up quickly by just touching the screen for working most swiftly and conveniently.

Optimized for POS applications

Microsoft Windows Embedded POSReady 7 is an operating system optimized for point-of-service (POS) and is based on Windows 7 Professional. Point of Service delivers improved customer service through the use of flexible devices such as self-checkout stations, self-service kiosks, information kiosks, food ordering kiosks, and more. All applications and drivers from Windows 7 will work on POSReady 7. POSReady 7 does not need to be activated. POSReady 7 devices are able to connect over internet to the Microsoft Update Server. All the normal patches from Win 7 will work with POSready.



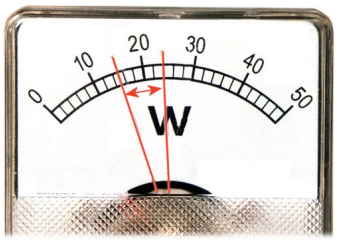
Great connectivity

Equipped with six USB ports and two COM ports if offers sufficient connectivity for typical POS peripherals like receipt printer, customer display, barcode scanner, cash drawer, keyboard, mouse and more.



All-in-One PC

Your complete PC system with many components already built in comes in just one single device! This includes the webcam, microphone, mainboard, display, touchscreen input interface, wireless LAN module and speakers. It helps you save space, looks simply stylish and reduces cable clutter.



Highly energy-saving

The Shuttle XPC all-in-one POS X5050PA barely consumes, depending on system load, about 14.7 ~ 24.1 Watt. Running the device*) 5 days a week for eight hours a day, the annual consumption would amount to approx. 31~50 kWh which would mean just 8~13 Euros on the power bill (25 Euro ct/kWh) - way less than a conventional desktop PC.
*) Based on a configuration with 4 GB of memory, 500 GB hard disk and Windows 7 Professional 64-bit.

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24/7 nonstop operation

The Shuttle XPC all-in-one POS X5050PA 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: 5-35°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



Fanless and quiet

The Shuttle XPC all-in-one POS X5050PA uses a passive thermal module with heatpipes to lead heat out of the case quickly and evenly. The unique fanless design makes it perfect to be used in noise-sensitive environments such as living rooms, hospitals, libraries etc. 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.



Connects to two external Full HD displays

The Shuttle XPC all-in-one POS X5050PA features two video outputs: One analog D-Sub/VGA connector and one HDMI connector. Two external Full HD displays can be connected in extended mode. Now add the built-in display of the POS X5050PA and there are three displays showing different content.



Protection Class IP54

The front panel of the Shuttle XPC all-in-one POS X5050PA is dust-protected and protected from splashing of water according to IPprotection 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 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 beaccessed from the front side: card reader and two USB ports.

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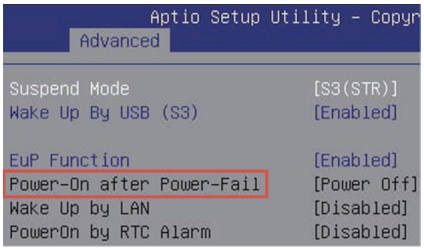
Supports high-performance M.2 SSD sticks

The M.2 slot (type 2280) is fully-equipped with 4X PCI-Express v3.0 lanes and SATA 3.0 interfaces. Modern M.2 SSDs with PCI Express interface (PCIe) and NVMe access provide a significant higher bandwith compared to the usual SATA standard. Type 2280 means it supports the usual M.2 cards with a width of 22mm and a length of 80mm, but also 2242 and 2260 standard cards are supported.



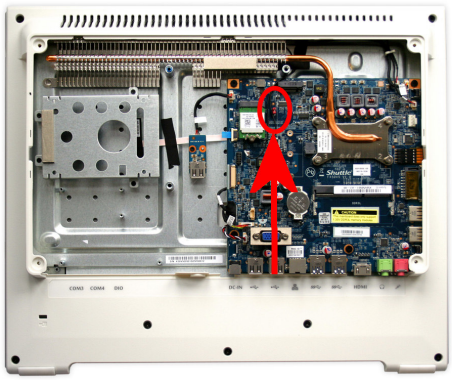
With 2x COM and LPT ports

The Shuttle XPC all-in-one POS X5050PA is delivered with the Shuttle Accessory **PCL71**, which provides two serial COM ports and one parallel LPT port. Legacy COM ports are still commonly used for applications such as industrial automation systems, scientific analysis, POS systems and other industrial applications.



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.



Always Power-on Jumper

The Shuttle XPC all-in-one POS X5050PA also comes with a hardware-based solution. By removing Jumper 7 (see picture), the system will start unconditionally once power is applied.

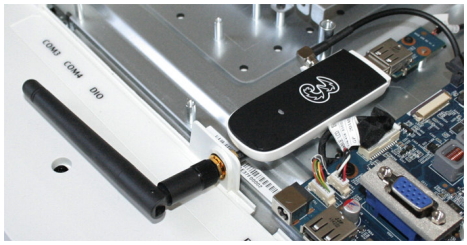


Hidden Power Button

The power button can be deactivated to prevent unauthorized use. Still it can be used with a straightened paper clip as shown on the left.

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Internal USB Slot and perforation for external antenna

The Shuttle XPC all-in-one POS X5050PA features an internal USB 2.0 connector (type A) for an USB stick of max. 9 cm in length and a 9 mm perforation for an optional antenna. The internal USB connector for expansion sticks (such as flash memory, DVB-T, SAT, 3G) or other USB devices like a radio module for home automation or RFID. Furthermore, there is a free USB header available on the mainboard.



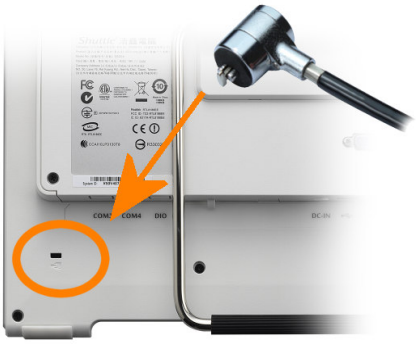
VESA mount

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.



Stylus for the touchscreen

The Shuttle XPC all-in-one POS X5050PA is equipped with a 5-wire resistive touchscreen for simple operation by finger (even with gloves) or stylus. The stylus comes supplied as standard and sits in an opening located at the top of the chassis. Using the stylus results in a smoother and more precise input than just using a finger.



Kensington Lock

This is a small, metal-reinforced hole as part of an anti-theft system. (Lock and cable not included.)



Carrying handle

The practical stand can be pulled upwards to also serve as a handle making the Shuttle XPC all-in-one POS X5050PA easy to carry. Clever!

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Shuttle XPC all-in-one POS X5050PA – Specifications

Fanless and silent	Passive heatpipe cooling, no fan noise at all Perfect to be used in noise-sensitive environments Fanless, dust-free and thus virtually maintenance-free
24/7 nonstop operation	This device is approved for 24/7 permanent operation.
IP54 protected	The front panel is dust-protected and protected from splashing of water according to protection class IP54.
Low power consumption	Power consumption: ca. 14.7 W (idle mode) and ca. 24.1 W (full load) When switched off: 0.13 W (S5 mode with EUP=on) (Configuration: 4 GB RAM, 60 GB SSD and Windows 7)
Chassis	Colour: white Dimensions: 391 x 327 x 42 mm (W x H x D) 100mm VESA mount capable Mounting hole for Kensington lock Weight: 3.08 kg net, 4.24 kg gross
Operation System	This system comes with the following operating system: Microsoft Windows Embedded POSReady 7 - 64 Bit
Touchscreen	Touchscreen function supports fingertip input Resistive 5-wire single-touch technology Stylus for the touchscreen included
15.6" Display	39.6cm / 15.6" LCD display, ratio: 16:9 widescreen panel Resolution: 1366x768 = 1.05 Megapixel Backlight unit: High power LED, Luminance: 220 cd/sqm Glass thickness: 0.5 mm

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Processor	Model: Intel Celeron 3855U (ULV) System-on-a-chip architecture (SoC): no chipset required BGA1356 package - directly soldered onto the mainboard Code name: Skylake-U (6th Generation Intel Core) Cores / Threads: 2 / 2 Clock rate: 1.6 GHz L1/L2/L3 Cache: 128 kB / 512 kB / 2048 kB Memory controller: DDR3L-1600 Dual Channel (1.35V) 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 510 (Intel HD Gen. 9) Two digital audio/video ports support two independent screens: 1) HDMI 1.4 supports 1920x1080 @ 60Hz or 4096x2304 @ 24Hz 2) VGA / D-Sub analog video GPU clock rate: 300~900 MHz Execution Units (EU): 12 Supports DirectX 12, OpenGL 4.4 Supports full h264, h265 8/10 bit, VP8/9, VC-1, AVC hardware decoding Supports Quick Sync Video and Clear Video HD technology Supports HD video plus multi-channel digital audio via a single cable Dynamic, shared memory: up to 1.7 GB
Up to three displays	Two video outputs: HDMI v1.4 and D-Sub (VGA) Supports triple display: the integrated display plus two external displays 1) Clone mode: all displays show the same content at 1366x768 resolution 2) Extended mode: all displays show different content, while the external displays run at Full HD resolution (1920x1080) maximum.
BIOS	AMI BIOS in 8 MByte EEPROM with SPI interface Supports Power fail resume / always on Supports Wake-on-LAN (WOL) from S3, S3, S5 ACPI states Supports hardware monitoring and watch dog functionality
Memory	4 GB DDR3L-1600 (PC3-12800) SO-DIMM module at 1.35V Maximum capacity: 16 GB
Storage	120 GB SSD in 6.35cm/2.5" format SATA 3.0 interface supports up to 600MB/s data transfer speed (6 Gbit/s)
M.2-2280 Slot	The M.2 2280 BM slot provides the following interfaces: - PCI-Express v3.0 X4 supports NVMe SSDs - 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 SSDs with SATA or PCIe interface.

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Card Reader	Integrated card reader supports SD, SDHC and SDXC memory flash cards
Webcam	Integrated 2.0 Megapixel (1600x1200) HD webcam
Microphone Speakers	Front panel with integrated Electret Condenser Microphone and 2x 2W speakers
Audio	Realtek ALC269 Audio Codec Two analog audio connectors (3.5mm): 1) Line-out (head phones) 2) Microphone input Digital Audio is supported via HDMI.
Wired Network	Intel i219LM PHY connected to the MAC of the processor Supports 10 / 100 / 1.000 MBit/s operation Supports WAKE ON LAN (WOL) Supports network boot by Preboot eXecution Environment (PXE)
Wireless Network	WLAN expansion card (M.2- 2230-AE) with two internal antennas Chip: Realtek RTL8821AE Supports Wireless LAN IEEE 802.11b/g/n/ac 1T1R, 2,4 GHz or 5 GHz Max. speed: 150 Mbps (2.4 GHz) or 433 Mbps (5 GHz) Supports Bluetooth 4.0
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 Hole with Clear CMOS button
Connectors bottom side	HDMI 1.4 (supports digital video and digital audio) 2x USB 3.0 2x USB 2.0 Gigabit Network (LAN, RJ45) Audio Line-out /head phone (3.5 mm jack socket) Microphone input (3.5 mm jack socket) DC input for external power adapter (5.5 / 2.5 mm) Perforation for optional TV/3G antenna (diameter: 9 mm)
Connectors rear side	VGA connector (D-Sub 15 pol., analog video) 2x COM/seriell (D-Sub) 1x LPT/Parallel

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Connectors onboard	Serial ATA (6 Gbps) Serial ATA power connector 4x USB 2.0 header (three occupied, one free) Fan connector (4-pin) eDP connector (Embedded DisplayPort) - occupied by the display Connector for optional COM/LPT adapter POS01 or PCL71
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 Connector: 5.5 / 2.5 mm (outer/inner diameter) Note: The POS X5050PA also supports a 60W power adapter with 12V DC output voltage
Included Accessories	Driver DVD External Power Adapter (65W / 19V) with Power cord
Optional Accessories	PCL71: COM / LPT adapter: - 1x Parallel (25p D-Sub) - 2x Serial RS232 (9p D-Sub) supports 0 / 5 / 12V POS01: COM / LPT 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 PF55: Carrying bag
Environ-mental criteria	Operating temperature: 0~35°C Humidity: 10~90%
Certification and Compliance	EMI: CE, FCC, BSMI Safety: CB, BSMI, ETL Other compliances: RoHS, ErP Lot6, Energy Star v5.0
Conformity	EMI: FCC, CE, BSMI, C-Tick Safety: ETL, CB, BSMI Other: RoHS, Energy Star, ErP 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) 2004/108/EC relating to electromagnetic compatibility (EMC), (2) 2006/95/EC relating to Electrical Equipment designed for use within certain voltage limits (LVD), (3) 2009/125/EC relating to ecodesign requirements for energy-related products (ErP), (4) 1999/5/EC related to Radio and Telecommunications Terminal Equipment (R&TTE)

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