AURA-W121-RK3576

IEI's New generation industrial Panel PC



Features

» IP65-rated front panel with robust aluminum bezel for harsh industrial environments

» Flat-bezel PCAP touch with anti-glare / anti-UV coating for clear visibility in bright areas

» Rockchip RK3576 octa-core SoC with 6 TOPS NPU for edge AI acceleration

» Front-panel hard keys (hotkeys) for quick access to essential controls

» PCAP touch with glove-friendly operation

» Front-facing speakers & integrated camera options, ideal for HMI and vision-assisted applications

» Rich I/O & wide-range power input (10–28V DC) for industrial integration

Specifications

System	
CPU	Rockchip RK3576 (Quad Cortex-A72 and quad Cortex-A53, 6 TOPS NPU)
On-board Memory	Onboard 8GB LPDDR5 memory, up to 16GB
Storage	Onboard 64GB eMMC
	1 x SD Slot
I/O Interface	
Ethernet	2 x RJ45 By YT8531
Audio	1 x Mic in & Line out
	2 x internal 2W speaker
Expansion	1 x board to board connector (Only supports IEI wireless modules)
	1 x 3042/52/80 B-key (PCIe Gen2 x1,USB2.0)
	1 x On-board SIM card socket (hinge type) for M.2 B key
I/O Ports	2 x RS232 & 2 x 485 By 1 x DB9
	1 x USB Type-C (USB 3.2 Gen1 + Displayport Alt Mode)
	3 x USB 2.0 Type-A
	1 x USB 3.2 Gen1 Type-A
	2 x CAN2.0 (6-pin terminal block)
	1 x Power button
	1 x Reset button
	1 x System LED (Orange)
Power	
Input	1 x 2-pin terminal block (10-28V DC)
Power consumption	12V@2.1A (Rockchip® RK3576 with 8GB Memory, 64G eMMC, Debian OS)
Environment	
Operating Temperature	-10°C ~ 60°C
Operating Vibration	MIL-STD-810H 514.8C-I with SSD
Operating Shock	IEC60068-2-27 half-sine, 5G, 11ms, 100 shocks with SSD
Safety & EMC	CE/FCC
Humidity	10% to 95%@40°C (non-condensing) (50%@60°C)
Storage Temperature	-20°C ~ 60°C
IP Level	IP 65 compliant front panel
Physical Characteristics	

Color	Black
Mounting	Panel Mount,Rack Mount,VESA 100
Dimensions (LxWxH) (mm)	298 x 217.50 x 49.30
Net Weight	2.26kg / 3.9kg
Construction	Aluminum front frame and sheet metal rear cover
Cutout Dimensions	288.60 x 195.10
LCD	
Size	12.1” (16:10)
Resolution	1280 x 800
Brightness (cd/m2)	500
Contrast Ratio	1200:1
LCD Color	16.7M
Viewing Angle (H-V)	170° / 170°
Backlight MTBF	50000 hrs
Touch	
Touch Screen	PCAP with USB interface (anti-UV/AG coating)
Touch Controller	Capacitive: Litek
Other Features	
Camera	720P Wide Angle Fixed Focus
Function Key	
Function Key	5-key Hot Key
OS Compatible	
OS Compatible	Android / Debian

Ordering Information

AURA-W121-RK3576-CFD-R10	12.1" 500 cd/m² 1280x800 Panel PC with Rockchip RK3576, 8GB LPDDR5, 64GB eMMC, 2xRJ45, CAN, COM, USB Type-C, black, 10-28V DC input, PCAP touch, Debian 12, R10
AURA-W121-RK3576-CFA-R10	12.1" 400 cd/m2 1280x800 Panel PC with Rockchip RK3576, 8GB LPDDR5, 64GB eMMC, 2xRJ45, CAN, COM, USB Type-C, black, 10-28V DC input, PCAP touch, Android 14, R10

Packing List

8 x Panel Mount Kit	1 x Terminal block plugs (1x2pin)
1 x Terminal block plugs (2x3pin)	1 x Screw kit (for installation)