APC-8210

DARVEEN

21.5" Android Panel PC with Rockchip RK3588/RK3568 Processor

Overview

Darveen APC-8210 is a 21.5-inch ARM-based Android Panel PC designed for industrial applications that demand high performance and multi-tasking capabilities. Powered by the powerful Rockchip RK3588 octa-core processor, it supports 8K video codec and delivers exceptional computing power for use cases such as manufacturing control systems, multimedia presentations, image recognition, and HMI optimization. The APC-8210 offers a rich set of I/O interfaces for seamless peripheral connectivity. It runs on Android 13 and is also available with Ubuntu Linux. For applications with lower power requirements, a configuration with the Rockchip RK3568 processor is also offered.

Features

- 21.5" LED backlight, multi touch capacitive touchscreen
- Rugged aluminum enclosure and fanless design
- Rich I/O interfaces for versatile connectivity
- Wi-Fi 6/ Wi-Fi 5, 4G/5G expansion
- Supports Android and Ubuntu Linux OS
- Supports VESA 100 mount and panel mount
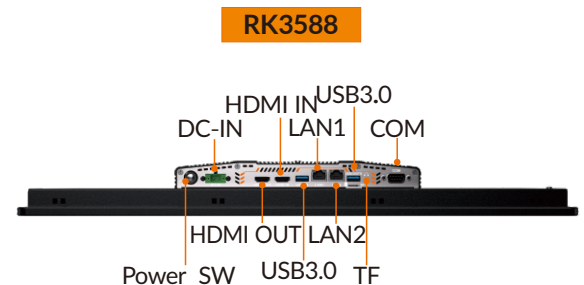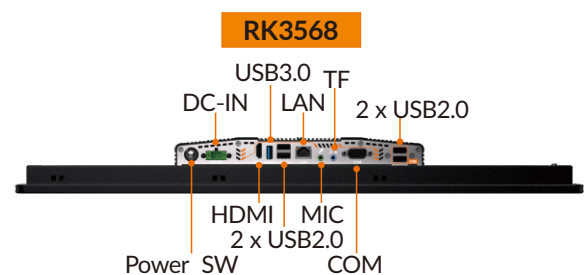- IP65 compliant front panel

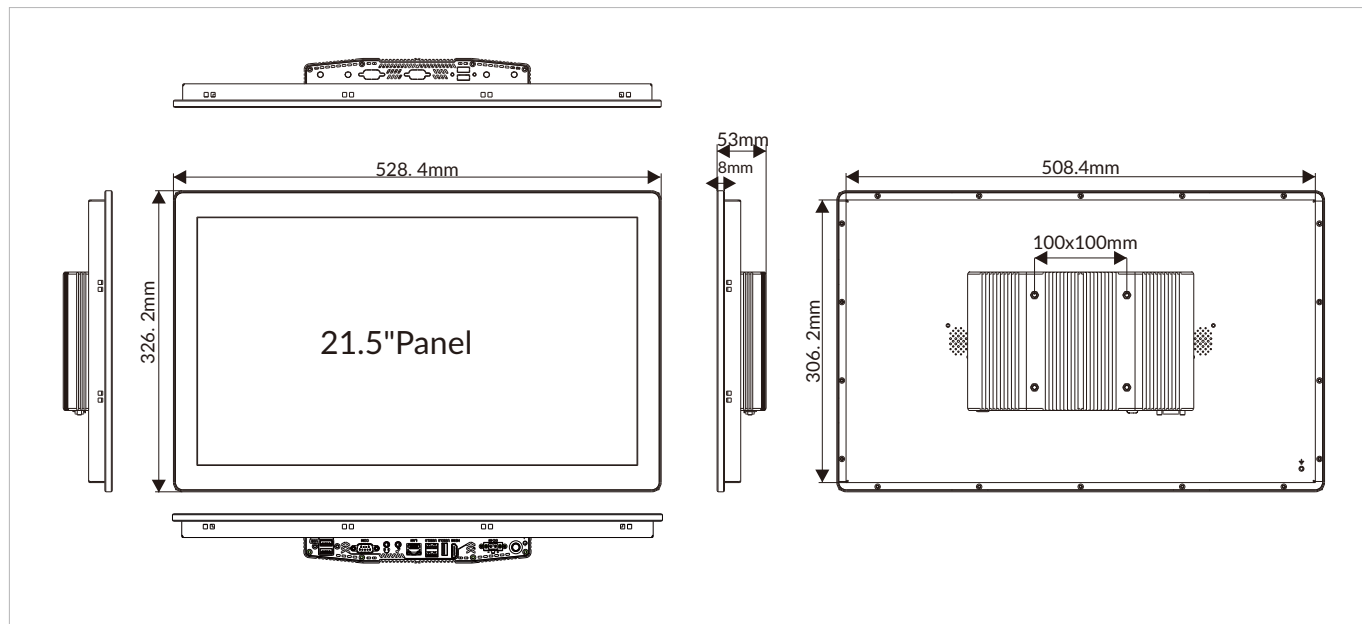| Operating Temp.	Android	IP65	Touch Display

CE FC

I/O Interfaces

RK3568

USB3.0 TF
DC-IN LAN 2 x USB2.0
HDMI MIC
2 x USB2.0
Power SW COM

RK3588

HDMI IN USB3.0
DC-IN LAN1 COM
HDMI OUT LAN2
Power SW USB3.0 TF

Specifications

Display		
Size	21.5 inch	
Touch Type	Projected capacitive multi touch	
Transmittance	87% (capacitive)	
Control Interface	USB	
Surface Hardness	≥7H	
Resolution	1920 x 1080	
Luminance	500 nits	
Contrast Ratio	1000: 1	
View Angles	85 (left), 85 (right), 85 (up), 85 (down)	
LED Lifetime	30,000 hrs	
Color	16.7M	
System		
CPU	Rockchip RK3568 Quad-core Cortex-A55 up to 2.0GHz	RK3588 quad core Cortex-A76, 2.4GHz and quad core Cortex-A55, 1.7GHz processors, NPU 6 TOPS
Chipset	ARM Mali-G52 GPU	ARM Mali-G610 MP4
Memory	DDR4 4G (onboard)	DDR4 8GB (onboard)
Storage	EMMC 32G (onboard)	EMMC 64G (onboard)
I/O Ports		
USB	1 x USB 3.0 (support OTG) 4 x USB 2.0	2 x USB 3.0 (One supports OTG) 2 x USB 2.0 (Optional)
Serial	1 x COM (COM1 supports RS-232)	1 x COM (COM1 supports RS-232)
Ethernet	1 x GbE LAN	2 x GbE LAN
Display	1 x HDMI out	1 x HDMI out,1x HDMI in
SIM Card Slot	/	1 x TF Card Slot
Antenna	2 x SMA antenna holes	
RF Communication		
Wi-Fi	onboard Wi-Fi 5	onboard Wi-Fi 6
Cellular	4G/5G (Optional)	
Bluetooth	V4.1	V5.3
Audio		
Audio	Mic in, line out	
Speaker	2x speaker	
Power		
Button	Yes	
DC Input	12V	
Power Consumption	20W	
Power Adaptor	AC-DC, 12V@5A, 60W	
Operating System		
Linux	Ubuntu	
Android	Android 11	Android 13
Mechanical		
Dimensions (W x D x H)	528.4 x 326.2 x 53 mm (20.8 x 12.84 x 2.1 inches)	
Weight (N.W.)	7.1 kg (15.65 lbs)	
Mounting	Panel mount, wall mount bracket VESA 100	
Material	Aluminum alloy panel, all-metal chassis	
Environment		
Operating Temperature	-10 to 50°C (14 to 122°F)	
Storage Temperature	-20 to 60°C (-4 to 140°F)	
Relative Humidity	10% to 95% @ 40°C (104°F), non-condensing	
Vibration	5-500Hz, 0.026 G²/Hz, 2.16 Grms, X, Y, Z, 1 hour per axis	
IP Rating	IP65 compliant front panel	

APC-8210

Certification	
EMC	CE, FCC
Packing List	
Packing	1 x APC-8210
	10 x panel mounting buckles
	1 x warranty card

APC-8210 (RK3568) Dimensions

APC-8210 (RK3588) Dimensions