



## OFP-21W33

**21.5" Full-HD PCAP Multi-Touch Fanless Open Frame Panel PC with Intel® Celeron® J3455 Processor**

- > 21.5" Full-HD Open frame panel PC with PCAP Touch
- > Onboard Intel® Celeron® J3455 SoC BGA Processor (2M Cache, up to 2.30 GHz)
- > 2 x 204-pin DDR3L 1600 & 1333MHz SO-DIMM supports up to 16GB
- > 2x GbE LAN, 4 x USB 3.0, Line-out, Mic-in, 1 x COM, DP++, HDMI/DP
- > Option for 4 x COM, 4 x USB2.0, 16-bit GPIO with DB9 connector
- > Slim & Strength Design
- > Fanless Operation from 0° ~ 45°C
- > Wide Voltage Input +12 ~ 24Vdc
- > Option for Wi-Fi & BT function
- > Option for Infineon SLB9665 TPM 2.0

**+** Spec

System Information	
<b>Processor</b>	Onboard Intel® Celeron® J3455 SoC BGA Processor (2M Cache, up to 2.30 GHz)
<b>System Memory</b>	Default with 4GB DDR3L Memory Option supports up to 16GB DDR3L 1600 & 1333MHz SO-DIMM
<b>I/O Chipset</b>	EC iTE IT8528
<b>BIOS Information</b>	AMI 128Mbit SPI BIOS
<b>Watchdog Timer</b>	H/W Reset: 1sec. ~ 65535sec./min. and 1sec. or 1min./step
<b>H/W Status Monitor</b>	Monitoring System Temperature and Voltage with Auto Throttling Control
<b>CPU Cooler (Type)</b>	Fanless Heatsink
<b>Board</b>	EMX-APLP
Expansion	
<b>Expansion</b>	1 x M.2 (2230) A-Key support WiFi module
Storage	
<b>Storage</b>	Default with 64GB mSATA
<b>Other Storage Device</b>	Reserve space for 1 x 2.5" Drive Bay design (by option)
Panel	
<b>LCD Size</b>	21.5", 16:9
<b>Display Type</b>	Full HD
<b>B/L Inverter/Converter</b>	LCD built in
<b>Resolution</b>	1920 x 1080
<b>Pixel pitch</b>	0.24795(H) x 0.24795(V)
<b>Luminance</b>	250 cd/m <sup>2</sup>
<b>Contrast ratio</b>	2000
<b>Viewing angle</b>	89 (U), 89 (D), 89 (L), 89 (R)
<b>Response time</b>	35 ms
<b>Backlight</b>	LED
<b>Touch Type</b>	Projective Capacitive Multi-Touch supports up to 10 points
<b>Touch Light Transmission</b>	89 %
<b>Touch Controller</b>	EETI
I/O	
<b>USB Port</b>	4 x USB 3.0, 4 x USB 2.0 (option)
<b>COM Port</b>	1 x RS232(default)/RS422/485, 4 x RS232(option, pin9 without power)
<b>DIO</b>	16-bit GPIO with DB9 connector(option)
<b>Expansion</b>	1 x M.2 (2230) A-Key support WiFi module
<b>Other</b>	2 x Antenna Mounting with Dust Cover (Reserve)
DC In/Out Characteristics	
<b>Power Type</b>	AT/ATX
Display	
<b>Graphic Chipset</b>	Intel® HD Graphics 500
<b>Spec. &amp; Resolution</b>	HDMI/DP: 3840 x 2160 @ 30Hz, 2560 x 1600 @ 30Hz
Audio	
<b>Audio Codec</b>	Realtek ALC662 supports 2-CH
<b>Audio Interface</b>	Mic-in, Line-out
<b>Audio Amplifier</b>	2 x Stereo Class-D 3W Audio Amplifier
Certifications	
<b>Certification Information</b>	CE / FCC Class A
Ethernet	
<b>LAN Chipset</b>	2 x Intel I211AT Gigabit Ethernet
<b>Ethernet Interface</b>	10/100/1000 Base-Tx GbE compatible



<b>LAN Port</b>	2 x RJ45
<b>Mechanical &amp; Environmental</b>	
<b>Operating Temperature</b>	0°C ~ 45°C
<b>Storage Temperature</b>	-20°C ~ 60°C
<b>Operating Humidity</b>	0% ~ 90% Relative Humidity, Non-condensing
<b>Dimension (W x L x H)</b>	501.9 x 296.2 x 52.4 mm
<b>Weight</b>	4.1Kgs
<b>Vibration Test</b>	With mSATA : 1.5Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 0.5hr/axis
<b>Shock Test</b>	Operating with mSATA : IEC 60068-2-27 testing procedures, 10G for operation mode
<b>Mounting Kit</b>	Flush / Panel / Wall Mount with mounting kits, VESA 100mm x 100mm
<b>Power Requirement</b>	+12V~24V DC in 3 pins Phoenix connector and Lockable DC Jack Extend Power Connector for on/off or Reset
<b>Power Mode</b>	AT/ATX
<b>System Fan</b>	Fanless
<b>Relative Humidity</b>	0~90% Relative Humidity, Non-condensing
<b>Fanless</b>	Yes
<b>Drop</b>	ISTA 2A, IEC-60068-2-32 Test:Ed
<b>Software Support</b>	
<b>OS Information</b>	Windows 10 IoT, Linux, x86 Android 8.1
<b>Ordering Information</b>	
<b>Ordering Information</b>	OFP-21W33-345-A1R 21.5" Full-HD Multi Touch Open Frame Panel PC / Intel Celeron J3455, 4GR,64GB mSATA,4USB3,COM,2LAN,DP++,DP,HDMI without adapter  ACC-OFP-21-PMT-01R Panel Mount Kits for OFP-21W series  ACC-OFP-21-WMT-01R Wall Mount Kits for OFP-21W series