



# VM23

## APOLLO LAKE FANLESS SIGNAGE PLAYER



Intel® Apollo Lake  
Celeron N3350 processor



DP (Max.4096 x 2304 @60 Hz)  
HDMI (Max.3840 x 2160 @30 Hz)



Support Wi-Fi/BT module



Fanless design

### CPU

	Intel® Celeron® N3350 processor
Frequency	2.40 GHz
Chipset	SoC
Processing Units	2 Cores/
TDP	6 W

### Network

Network Controller	1 x Realtek RTL 8111H Gigabit Ethernet
Ethernet Interface	1 x RJ45
Wi-Fi/BT	1 x E-Key M.2 (2230) for Wi-Fi/BT
Mobile Network	NA

### System

System Memory	2 GB/4 GB, Onboard LPDDR4-2133 MHz
Storage	32 GB/64 GB, Onboard eMMC 1 x Full-size Mini-PCIe for MSATA
TPM	Optional: TPM2.0
Watchdog Timer	Yes
Auto Power On	Yes
RTC	Set up independently every day, a week as a cycle
Power Requirement	DC-IN, 12 V/2.0 A
Dimensions	116.6 mm x 107.4 mm x 30 mm (4.59" x 4.23" x 1.18")
Construction	Metal, Black
Operating System	Windows 10 (64bit) /Linux Ubuntu (64bit)
Operating Temperature	0°C ~40°C (32°F~104°F) @0.7m/s Air Flow
Humidity	95% @ 40°C (non-condensing)
Certifications	CE, FCC Class B, UKCA

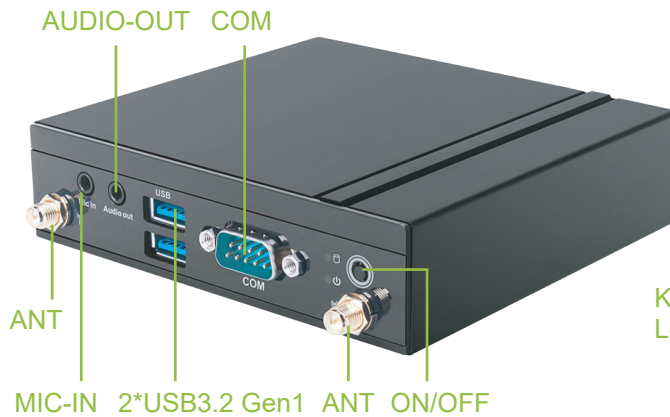
### Display

GPU	Intel® HD Graphics 500
Graphic Engine	DirectX 12, OpenGL 4.3, OpenCL 2.0
Display Interface	1 x DP (Max.4096 x 2304 @60 Hz) 1 x HDMI (Max.3840 x 2160 @30 Hz)

### I/O interface

USB	2 x USB3.2 Gen1, 2 x USB2.0
Serial Port	1 x RS232
Audio	1 x MIC-IN, 1 x AUDIO-OUT
Button	1 x Power on, 1 x CLR-CMOS
Antenna	2 x Connector for Wi-Fi/BT

## Dimensions and Drawing



## Order information

<b>VM23-F4 -N335031E5G-GIA</b>	CPU: Intel® Celeron® N3350, RAM: 2 GB, Onboard LPDDR4-2133 MHz Storage: 32 GB, Onboard eMMC
<b>Packing List</b>	2 x Wi-Fi Antenna, 1 x AC Power Cable, 1 x AC Power Adapter
<b>Package</b>	Carton, EPE

## Optional items

<b>VESA Mounting</b>	VESA Mounting Kit (JC530)
<b>Wi-Fi/BT Module</b>	<b>Wi-Fi 5 (802.11ac):</b> Intel® Wireless-AC 9260, Intel® Wireless-AC 9560
<b>Operating System License</b>	Windows 10 (64bit)

