

# USM-110

## RISC Based 4K Digital Signage Player



### Features

- Built-in Arm® Cortex®-A17 quad-core processor (1.6 GHz)
- 2 GB onboard memory (4G memory optional)
- 16GB eMMC onboard expandable MicroSD (TF) storage
- Dual HDMI outputs (1 x supports 4K resolution and 1 x supports 1080P resolution)
- Ultra-compact design for easy installation in confined spaces
- Supports various mount options including VESA, wall, pole, Magnet, and DIN-rail mounting
- Can be integrated with optional Wi-Fi, Bluetooth, and 4G LTE modules
- Equipped with WISE-PaaS/SignageCMS software, which supports multi-screen displays
- Supports Android 6.0/8.1, Linux Debian9.0
- RED Compliance



### Introduction

USM-110 is an ultra-compact digital signage player that delivers high-performance graphics and supports H.265-encoded native 4K content at 60fps as well as dual Full HD video output. The system's ultra-compact fanless design and support for diverse mount options ensure easy installation in a wide range of application markets. Moreover, USM-110 is integrated with Advantech's WISE-PaaS/SignageCMS digital signage management software, which allows users to layout, schedule, and dispatch signage contents to the USM-110 digital signage player over the Internet, enabling remote delivery of diverse high-resolution multimedia.

### Product Highlights



#### 2 x HDMI with locks

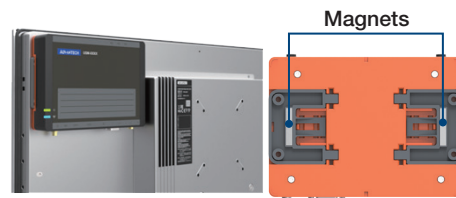
- Supports native 4K content @60fps
- Dual 1080P resolution outputs



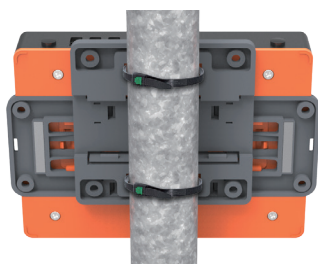
VESA Mount (75 x 75 mm)



Wall Mount (using the two side wings)



Magnet Mount (attached using magnets on the two wings)



Pole Mount (attached using cable ties)



DIN-Rail Mount

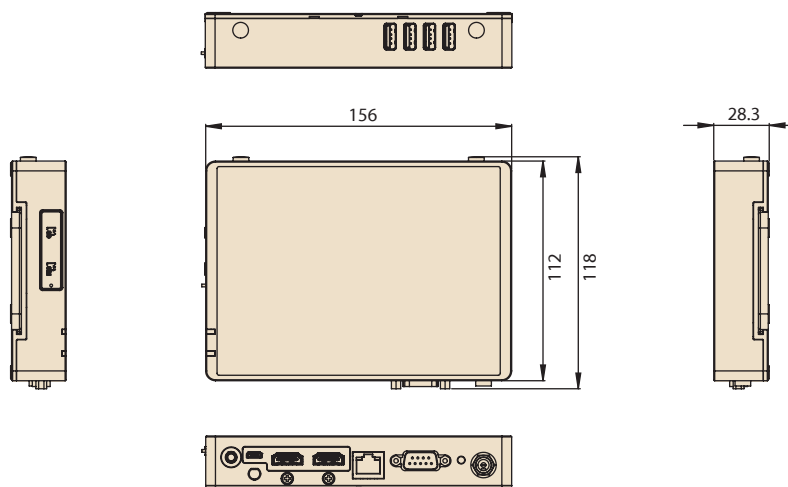
## Specifications

		USM-110	USM-110 Delight
System	CPU	Arm® Cortex®-A17 quad-core processor (1.6 GHz)	
	GPU	Mali-T764	
Graphics	Graphics Engine	OpenGL ES 1.1/2.0/3.0, OpenCL 1.1, DirectX 11	
	Capacity	2 GB onboard memory (4G memory optional)	
Memory	Flash	16 GB of onboard eMMC	8 GB of onboard eMMC
	Extension	Micro SD	
Multimedia	H/W Video Codec	Decoder: 4K 10-bits 60fps H.265, H.264, MPEG-1, MPEG-2, MPEG-4, VC-1, VP8, AVS, MVC Encoder: 1080P for H.264 (BP@level4.0, MP, HP@level4.0), MVC and VP8	
	Display Resolution	HDMI1, Native 4K resolution up to 3840 x 2160 @ 60 Hz (default 1080p) HDMI2, 1920 x 1080 @ 60 Hz (no audio output)	N/A
I/O	HDMI	2	1
	LAN	1 x 10/100/1000 Mbps	1 x 10/100/1000 Mbps
	Serial Port	1 (RS232/485/422 by jumper)	N/A
	USB 2.0	4	2
	OTG USB	1	1
	Audio	1	1
	Reset	1	1
	LED Indicators	1 x Power, 1 x Wireless	1 x Power, 1 x Wireless
	DC In	1	1
Expansion	Micro SD Card Slot	1	1
	M.2	1 (for Wi-Fi module option)	1 (for wifi module option)
	Mini PCIe	1 (for 4G module option)	N/A
Mechanical	Dimensions (L x W x H)	156 x 112 x 28 mm (6.14 x 4.41 x 1.10 in)	
	Weight	0.43 kg (0.94 lb)	
	Power	12V/3A	
Installation	Mount Options	VESA (75 x 75), wall, desktop, pole, magnet, DIN rail	
Software	Operating System	Android 6.0/8.1/Linux Debian 9.0 (Linux not support 4K)	
	Software	WISE-PaaS/SignageCMS (Only for Android 6.0 system)	
	Display Orientation	Portrait and landscape modes supported	
	Client Status Reports	Generates Heartbeat, System reports	
	Supported Media Formats	Image: JPG, PNG, BMP, GIF; Video: H.264, MPEG-4, MPEG-2; Text: text, scrolling text; Audio: MP3, AAC, PCM	
Environment	Operating Temperature	0 ~ 40° C (32 ~ 104° F)	
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)	
	Relative Humidity	90% @ 40° C (non-condensing)	
Certification		CCC/BSMI/CE/FCC/UL/CB	

## Dimensions

USM-110

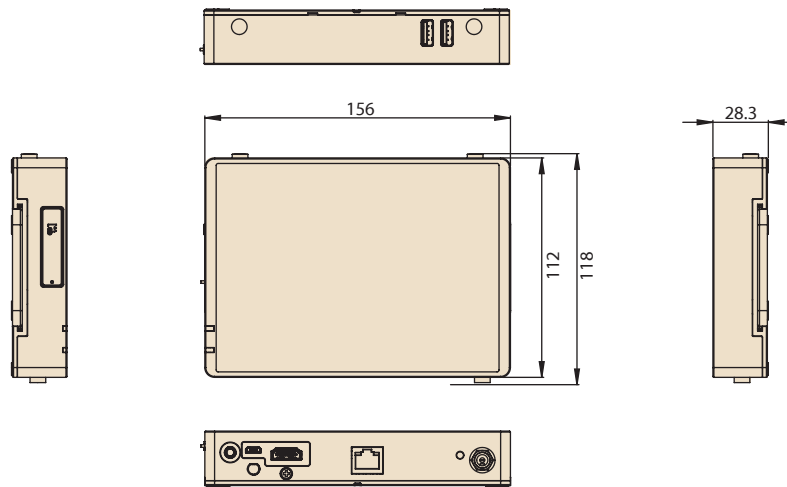
Unit: mm



## Dimensions

### USM-110 Delight

Unit: mm



## Ordering Information

PN	Description	RAM	Storage	OS	SW	RTC auto power on/off
USM-110A-BR111	Cortex A17,2G/8G,1 HDMI,Android6.0,CMS	2GB	8GB	Android 6.0	WISE-PaaS/SignageCMS (Client)	Support
USM-110A-BR121	Cortex A17,2G/16G,2 HDMI,Android6.0,CMS	2GB	16GB	Android 6.0	WISE-PaaS/SignageCMS (Client)	Support
USM-110A-BR122	Cortex A17,2G/16G,2 HDMI,Android8.1	2GB	16GB	Android 8.1	NA	Support
USM-110A-UR110	Cortex A17,2G/8G,1 HDMI,2USB,Android 6.0,CMS,USA	2GB	8GB	Android 6.0	WISE-PaaS/SignageCMS (Client)	Support
USM-110A-UR121	Cortex A17,2G/16G,2 HDMI,4USB,1COM,Android8.1,USA	2GB	16GB	Android 8.1	NA	Support

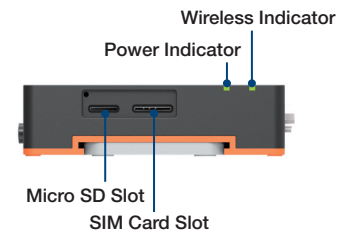
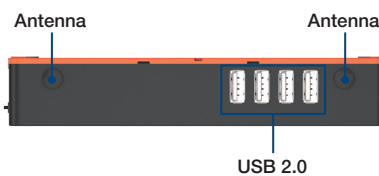
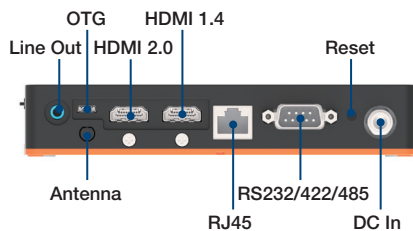
## Optional Accessories

Product	Part Number	Usage	Description
4G Module	968AD00081	1	Quectel EC20CEFA Mini-PCle 4G module for China region
	1750006264	1	Antenna cable SMA(F)/MHF 15 cm
	1750007990-01	1	Antenna 4G/LTE full band L=11 cm 50 Ohm
Wifi/BT4.0 Module	IRS-WIFI-AOE	1	USM-110,WIFI KIT,W167,M.2-E,1T1R, BT4.0,Antenna EWM-W167M201E*1 + 1750008800-01*1 + 1750008671-01*1
HDMI Cable	1700023855-01	1 or 2	M cable HDMI 19P(M)/HDMI 19P(M) 1M with dual locks

Product	Part Number	Usage	Description
Power Cord	96CB-POWER-B-1.8MB		RW0.75 Black/3L 1.8M(CCC)
	1700001524		3P UL 10A 125V 180cm(American)
	170203183C		3P 3P EU (WS-010+083) 183CM(European)
	1700018553		Power Cord SAA 3P 2.5A 250V 183cm(Australia)
	1700025113-11		Power Cord ISI 3P 2.5A 250V 180cm(India)
	1700018409		Power Cord KCC 2P 2.5A 250V 183cm(Korea,Russia)
	1700024849-01		Power Cord BSMI 3P 2.5A 125V 180cm(Taiwan)
	170203180A		Power Cord BSI 3P 2.5A 250V 183cm(UK)
1700008921		3P 1.8M PSE 7A 125V(Japan)	

## I/O Interface

### USM-110



### USM-110 Delight

