

USM-110

RISC Based 4K Digital Signage Player



Features

- Built-in Arm® Cortex®-A17 quad-core processor (1.6 GHz)
- 2 GB onboard memory
- 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 /Linux Debian9.0



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



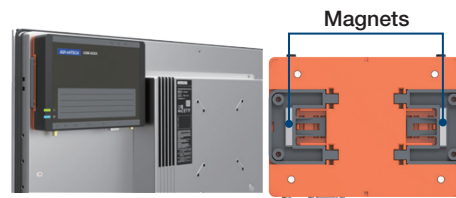
- 2 x HDMI with locks**
- Supports native 4K content @60fps
 - Dual 1080P resolution outputs



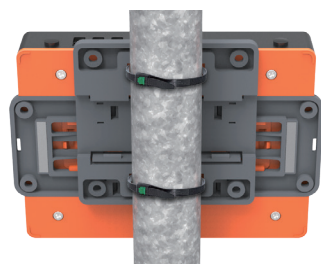
VESA Mount (75 x 75 mm)



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

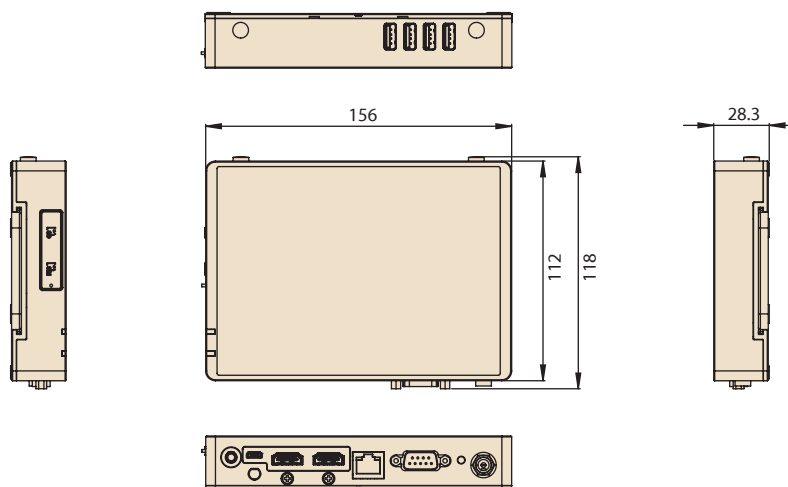
Specifications

| | | 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 | |
| | Memory Capacity | 2 GB onboard DDR3L (1333 MHz) | |
| Storage | 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 (default 1080p) HDMI2: 1920 x 1080 | |
| 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/Linux Debian 9.0 (Linux not support 4K) | |
| | Software | WISE-PaaS/SignageCMS (Only for Android 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

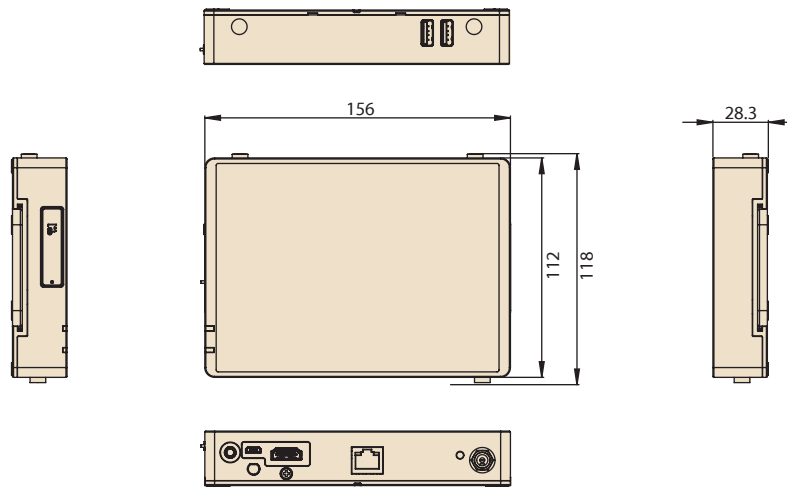
Unit: mm



Dimensions

USM-110 Delight

Unit: mm



Ordering Information

| P/N | Description | RAM | Storage | OS | SW |
|----------------|--|-----|---------|-------------|-------------------------------|
| USM-110A-BR120 | ARM Cortex-A17 quad-core CPU (1.6 GHz) with 2 x HDMI, 4 x USB 2.0, 1 x COM, and 1 x OTG USB | 2GB | 16GB | Android 6.0 | WISE-PaaS/SignageCMS (Client) |
| USM-110A-BR110 | ARM Cortex-A17 quad-core CPU (1.6 GHz) with 1 x HDMI, 2 x USB 2.0, and 1 x OTG USB | 2GB | 8GB | Android 6.0 | WISE-PaaS/SignageCMS (Client) |
| USM-110A-UR120 | ARM Cortex-A17 quad-core CPU (1.6 GHz) with 2 x HDMI, 4 x USB 2.0, 1 x COM, and 1 x OTG USB; For USA | 2GB | 16GB | Android 6.0 | WISE-PaaS/SignageCMS (Client) |
| 968SPUDSS0 | WISE-PaaS/SignageCMS Standard Server License | - | - | - | Server SW |

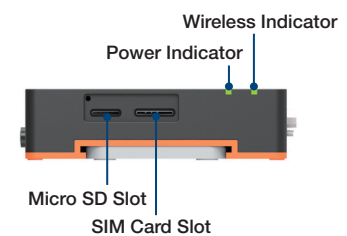
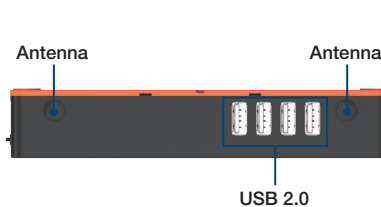
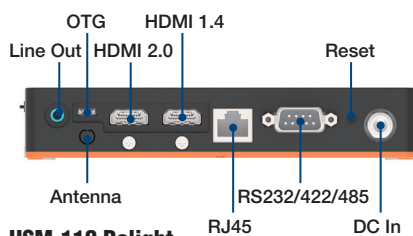
Optional Accessories

| Product | Part Number | Usage | Description |
|-------------------|---------------|--------|--|
| 4G Module | 968AD00081 | 1 | Quectel EC20CEFA Mini-PCIe 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 IEEE-802.11b/g/n (1x1)+BT4.0 RTL8723BS SDIO modu |
| Wifi/BT4.0 Module | EWM-W167M201E | 1 | Antenna Cable R/P SMA (M) to MHF4, 100mm |
| | 1750008800-01 | 1 | Antenna Cable R/P SMA (M) to MHF4, 100mm |
| | 1750008671-01 | 1 | Dipole Ant.SMA/M-R 2.4/5G 2.5/4dBi BLK 109 mm |
| 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 3P 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



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