PRODUCT SPECIFICATION

HUIDU TECHNOLOGY
灰度科技

Multimedia Player

HD-A3L

Version 1.0

Ⅰ. Product Overview

A3L is an LED display multimedia player that supports playing videos, pictures, GIF animations, texts, WPS documents, tables, clocks, timing, and other programs.

Standard configuration of Wi-Fi, support mobile phone APP - "LedArt" wireless control; support access to the "XiaoHui Cloud" platform, easy to achieve Internet remote cluster management; The capacity storage space makes asynchronous playback worry-free; it supports external connection of various environmental monitoring sensors to realize real-time viewing of environmental monitoring data.

A3L has high video playback performance, added terminal network security protection mechanism, simple software operation, complete functions, and ultra-high cost performance. It can be applied to LED displays in various commercial display, smart display and other fields.

Ⅱ. Product Features

Input:

1. Support 1 communication network port for debugging parameters, faster program sending speed;

2. Support 1 channel USB2.0, 1 channel USB3.0 communication interface, which can be used for inserting programs and expanding capacity;

3. Supports 1 channels sensor input interface, externally connected to various environmental monitoring sensors.
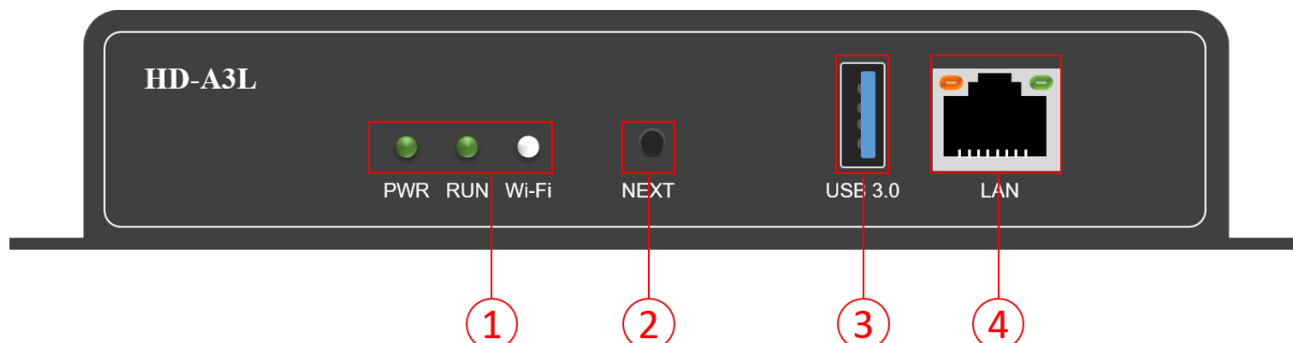
Output:

1. Standard 1 Gigabit output network ports, directly cascaded HD-R series receiving card control display;

2. The maximum control range is 655,360 pixels, the maximum horizontal (discounted) support is 8192 pixels, and the maximum vertical support is 3840 pixels;

3. 1 channel TRS 3.5mm standard two-channel audio output.
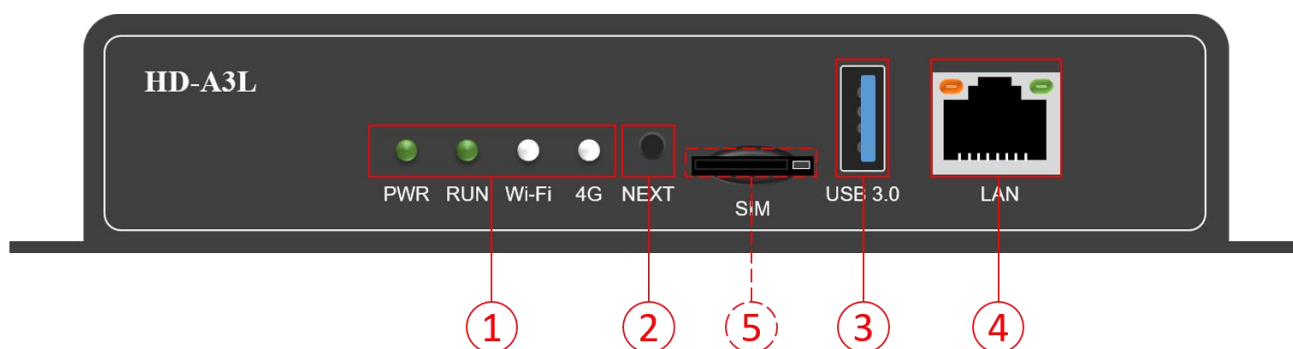
Functions:

1. Standard Wi-Fi, support mobile phone APP wireless control (support STA mode, in this mode, the device can connect to the nearby Wi-Fi network);

2. Support multi-channel video window playback (support up to 1-channel 4K or 2-channel 1080P or 4-channel 720P or 6-channel 360P);

4. Support 4G (optional) access to XiaoHui Cloud platform to realize Internet remote cluster management.

Ⅲ. Appearance Description

Standard Version Front Panel:

HD-A3L

PWR RUN Wi-Fi   NEXT   USB 3.0   LAN

① ② ③ ④

4G Version Front Panel:

HD-A3L

PWR RUN Wi-Fi 4G NEXT SIM USB 3.0 LAN

① ② ⑤ ③ ④

Serial number	Name	Description
1	Working light	**PWR**：Power indicator light, the green light is always on, and the power input is normal **RUN**：System running light, the green light is flashing, the operating system is running normally; the green light is always on or off, the system is running abnormally **Wi-Fi**：Wireless indicator light, in AP mode, the green light is blinking; in STA mode, the green light is always on. The red light

		is blinking, the Wi-Fi is abnormal, and the light is off; the Wi-Fi bridge cannot connect to the server, and the yellow light is always on **4G**：Communication network indicator, green light is always on, the connection to the cloud server is successful; yellow light is always on, the cloud service cannot be connected; red light is always on, there is no signal or the SIM is in arrears or cannot dial; the red light is blinking, the SIM cannot be detected; No light, no module detected(Only 4G version has 4G indicator light).
2	Function button	Switch program play, support change to TEST mode
3	USB	USB3.0 for updating programs, inserting programs or expanding capacity
4	Input network port	100Mpbs network port input, connect to computer to debug and release programs, can be used to access LAN or Internet
5	SIM card slot	Nano SIM card slot, providing 4G/5G networking for remote control (optional 4G module)

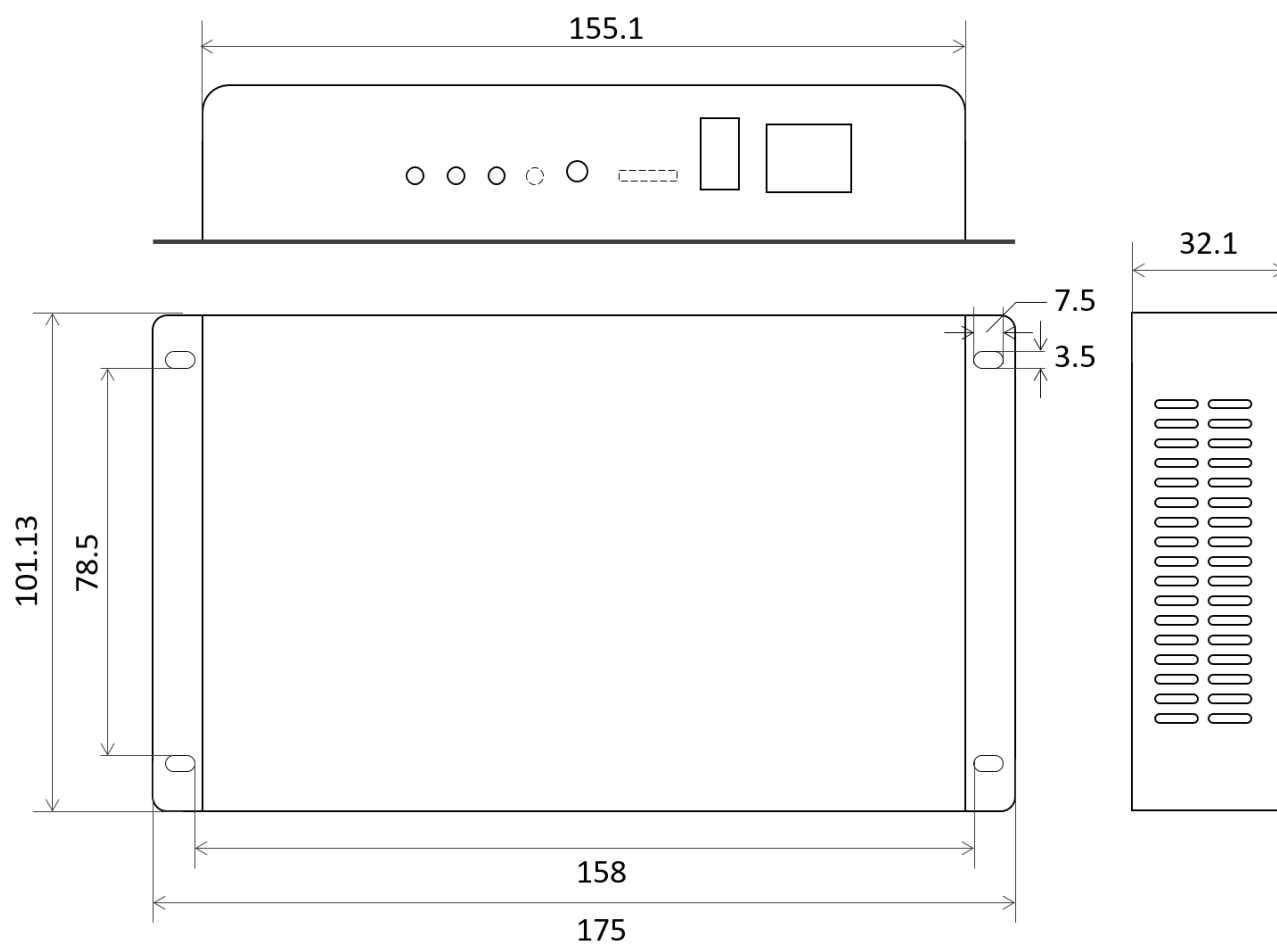**Standard Version Rear Panel:**
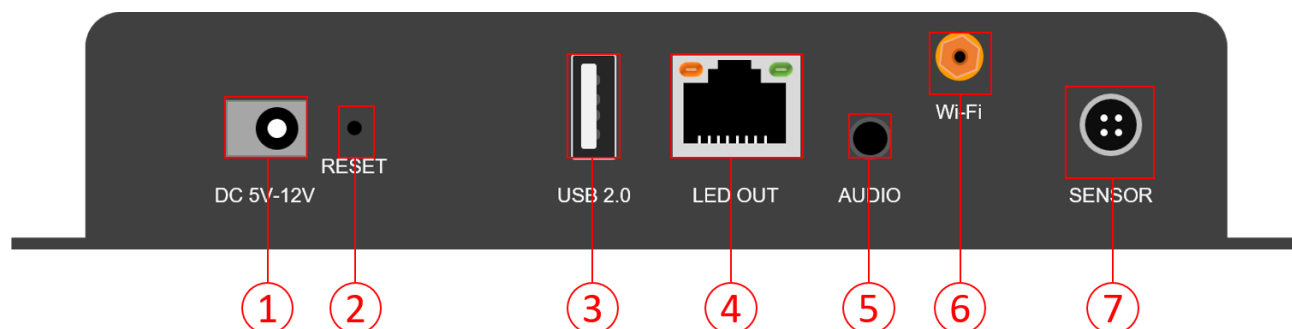
4G Version Rear Panel:
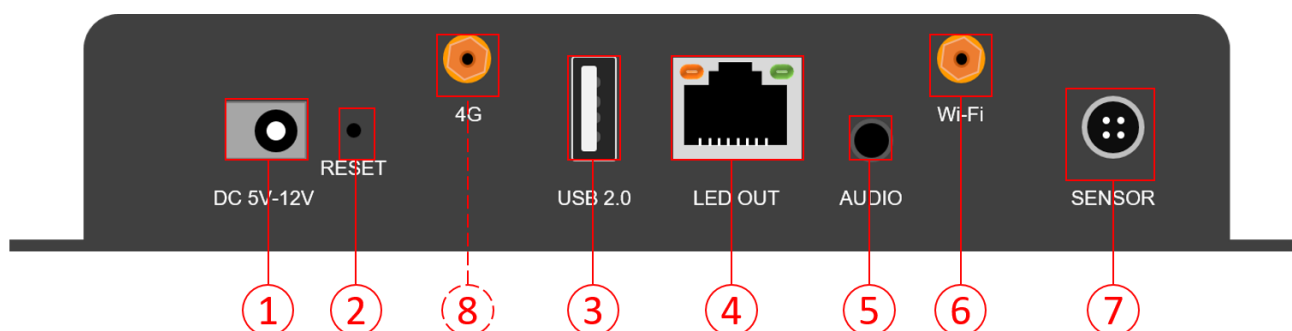
Serial number	Name	Description
1	Power supply	5V 3A ,12V 1.5A
2	Reset	Reset pinhole
3	USB 2.0	Used for updating programs, inserting programs or expanding capacity(support change to OTG function)
4	Output network port	Gigabit output network port, cascaded with HD-R series receiving card
5	Audio output	TRS 3.5mm standard two-channel audio output port
6	Wi-Fi antenna	Connect Wi-Fi antenna to enhance wireless signal
7	Sensor	External temperature, humidity, brightness, wind speed, wind

		direction, noise, PM2.5, PM10, CO_2 and other sensors
8	4G antenna	Connect 4G antenna (Only 4G version has)

IV. Product Parameters

Dimensions (mm):

Tolerance: ±0.3 Unit: mm

Product Specifications:

Electrical parameters	Input power	DC 5V-12V
	Maximum power consumption	18W
Storage Space	Random access memory	1GB
	Internal storage	16GB
Storage environment	Temperature	-40℃ ~ 80℃
	Humidity	0%RH ~ 80%RH (No condensation)
Working environment	Temperature	-40℃ ~ 70℃
	Humidity	0%RH ~ 80%RH (No condensation)
Packaging information	list: 1×A3L 1 x power adapter 1×Wi-Fi Glue Stick Antenna 1× Certificate of qualification Note: 4G antenna are work with 4G version	
Size	175mm×101.1mm×32.1mm	
Net weight	Standard version: 240g 4G version: 260g	

Protection degree	IP20 Please pay attention to water resistance, e.g. prevent water dripping into the product, do not get wet or rinse the product
System software	Android 11.0 operating system software Android terminal application software

Media Decoding Specifications:

Pictures

Category	Decoding	Size	Format	Remarks
JPEG	JFIF file fommat 1.02	48x48 pixels to 8176x8176pixles	JPG、JPEG	Non-interlaced scanning is not supported; SRGB JPEG is supported; Adobe RGB JPEG is supported
BMP	BMP	Unlimited	BMP	NA
GIF	GIF	Unlimited	GIF	NA
PNG	PNG	Unlimited	PNG	NA
WEBP	WEBP	Unlimited	WEBP	NA

Videos

| Category	Decoding	Resolution	Max frame rate	Max bit rate (Ideal situation)	Format	Remarks
MPEG-1/2	MPEG-1/2	48×48 pixels to 1920×1088 pixels	30fps	80Mbps	DAT, MPG, VOB, TS	Support Field Coding
MPEG-4	MPEG-4	48×48 pixels to 1920×1088 pixels	30fps	38.4Mbps	AVI, MKV, MP4, MOV, 3GP	MS, MPEG4 v1/v2/v3, and GMC are not supported
H.264/AVC	H.264	48×48 pixels to 4096×2304 pixels	2304P@30fps	100Mbps	AVI, MKV, MP4, MOV, 3GP, TS, FLV	Support High and High 10 Profile Coding, MBAFF
MVC	H.264 MVC	48×48 pixels to 4096×2304 pixels	2304P@30fps	100Mbps	MKV, TS	Only Stereo High Profile is supported
H.265/HEVC	H.265/HEVC	64×64 pixels to 4096×2304 pixels	2304P@60fps	100Mbps	MKV, MP4, MOV, TS	Support Main Profile& Main10 Profile, Tile & Slice
GOOGLE VP8	VP8	48×48 pixels to 1920×1088 pixels	30fps	38.4Mbps	WEBM, MKV	NA
GOOGLE VP9	VP9	64×64 pixels to 4096×2304 pixels	30fps	80Mbps	WEBM, MKV	NA

H.263	H.263	SQCIF(128×96) QCIF(176×144) CIF(352×288) 4CIF(704×576)	30fps	38.4Mbps	3GP, MOV, MP4	H.263+ is not supported
VC-1	VC-1	48×48 pixels to 1920×1088 pixels	30fps	45Mbps	WMV, ASF, TS, MKV, AVI	NA
MOTION JPEG	MJPEG	48×48 pixels to 1920×1088 pixels	30fps	38.4Mbps	AVI	NA

Ⅴ. Application Scenarios

1. Single-node control, support Wi-Fi, network port direct connection, USB interface for communication.
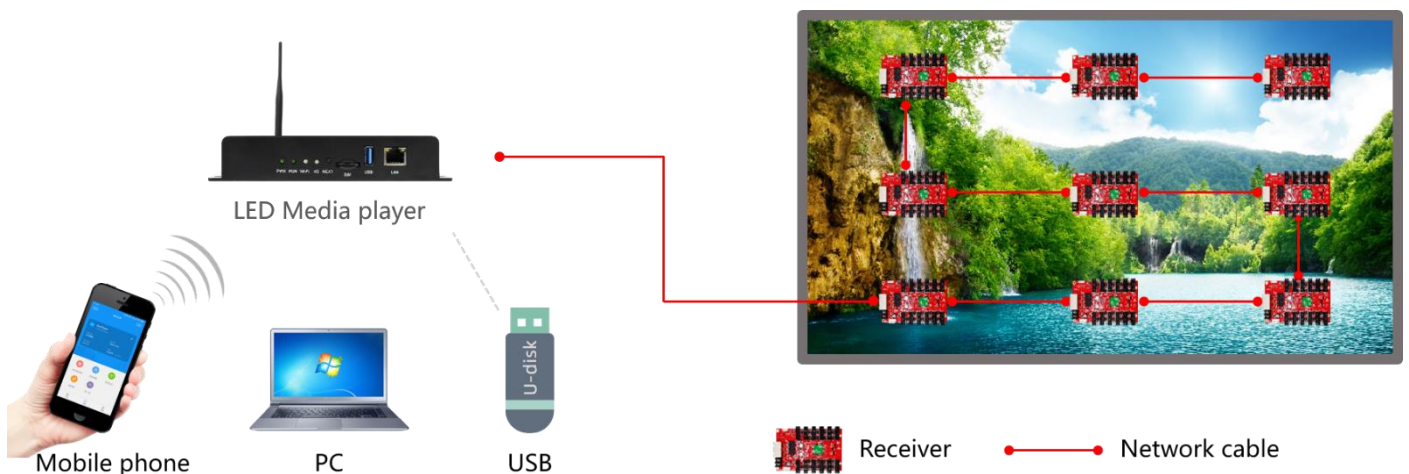
2. Cluster control, support Internet remote control.
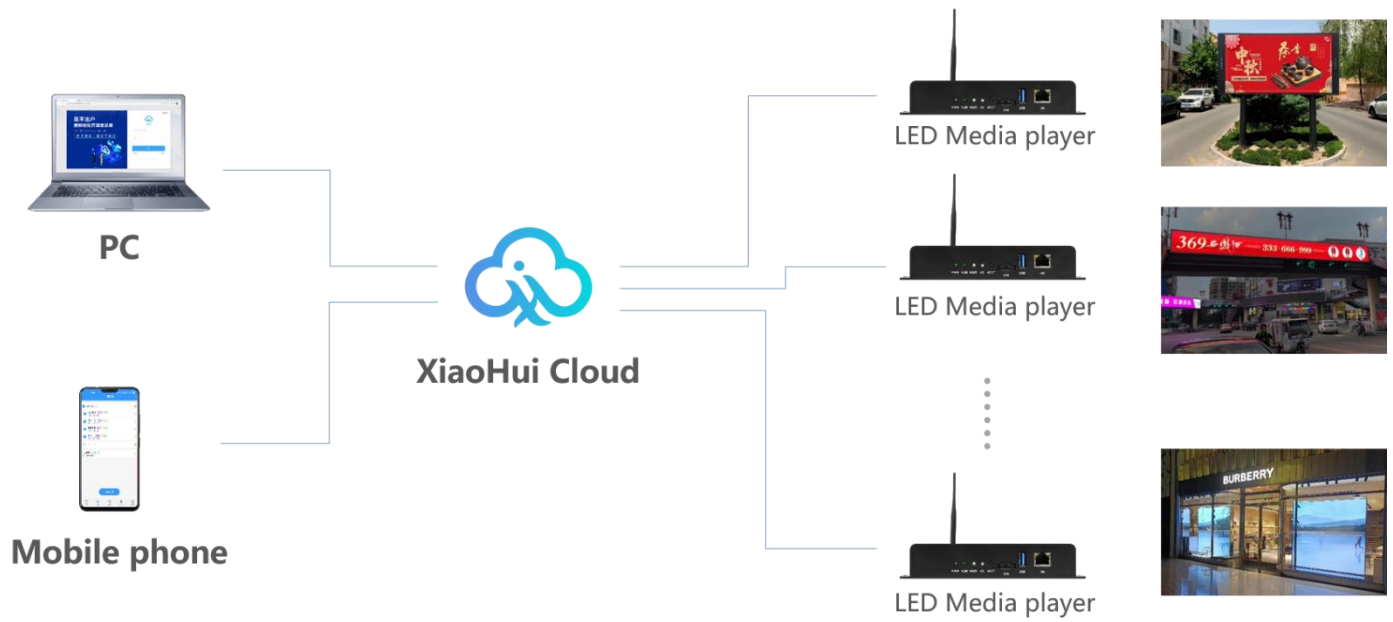
VI. Product Appearance

Illustration:

Welcome to choose Huidu Technology products. There may be differences between the product pictures in the specification and the actual appearance (such as interface caps, antenna installation, etc.), please refer to the actual product. If you have any questions, please contact technical support or salesperson for confirmation.