

Hanshow Lumina Aqua-1010 Series Product Manual

V1.0.0

HS-ESL-LA101001

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ABOUT THE DOCUMENT

The document introduces the Lumina Aqua-1010 series information such as features, spec, package and precautions, etc.

Please read the product manual carefully before using this product, retain the manual for subsequent use or for the next owner. If the instructions contained in this manual are insufficient to resolve issues that occur during device operation or maintenance, please contact Hanshow Technical Customer Service Center (China: 400-0365-305; Netherlands: 0800-022-5037; Belgium: 0800-71-335; France: 0800-91-7602; Thailand: 1800-011-185) directly, we will provide you with multi-channel technical services.

TARGET USERS

This document provides engineers with the necessary data and detailed usage precautions of Lumina Aqua-1010 series products. Users have to master the basic knowledge on communication and Network. This document is applicable for the below engineers:

- Testing engineer
- Technical support engineer
- After sales engineer
- Installation engineer

SYMBOL DESCRIPTION

Icon	Description			
\triangle	Information indicated with this icon should be paid special attention and attached great importance by the reader.			
	Information indicated with this icon is the explanation on the formal text for the readers to comprehend the text better.			
[X-X]	It means special noun definition is provided here.			

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1 Overview

Lumina Aqua-1010 series is a Hanshow's digital signage product allowing for video, split-screen displays, ESL functionality, and other promotional displays. With high performance and low power consumption, Lumina Aqua-1010 provides a better marketing experience.

Lumina Aqua-1010 series works in 2.4GHz Wi-Fi network for transmitting task data in real-time based on MQTT protocol and requesting playback materials from material server via URL based on HTTPS protocol. It integrates video streaming hard-decoding, Wi-Fi, full-color display screen and other modules.

1.1 System architecture

The digital signage system consists of signage, a cloud data center, and Wi-Fi. Specifically, the cloud data center includes the PriSmart system, NTP server, Focusmart system and materials center. The digital signage is used for displaying product information and video ads. The system architecture is shown below in *Figure 1-1*.

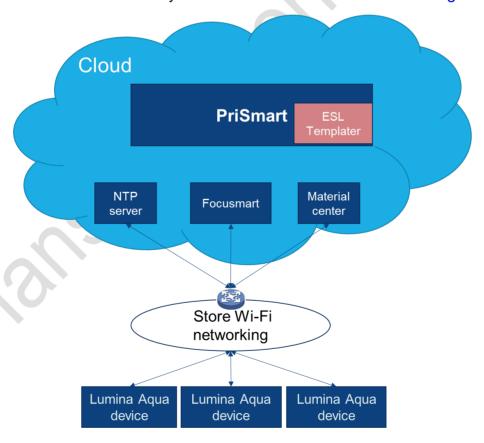


Figure 1-1 Digital signage system architecture

1.2 Features

The features of Lumina Aqua-1010 include:

- Supports MQTT and HTTPS transfer protocol.
- Quick networking for batch Lumina Aqua-700 devices installation.
- Three display modes include: image, video, image + video. Using image + video mode, place image and video in anywhere in the display area but avoid overlap.
- Full-color video playback.
- Supports multi-screen synchronized video or image playback when the video or image materials have the same format and frame rate. Timed playback functionality is also supported.
- Instant update.
- Timing sleep and wake-up function available for various application scenarios, which is energy-saving and environmentally friendly.
- Support two upgrade modes: Online upgrade and USB upgrade. Easy to maintenance and functionality expansion.

2 Product information

This chapter covers:

- Product view
- Specifications
- Identifying your device
- Product ID&nameplate

2.1 Product view

Figure 2-1 shows Lumina Aqua-1010 appearance.



Figure 2-1 Lumina Aqua-1010 appearance

The key components of Lumina Aqua-1010 series and their description are shown in *Figure 2-2* and *Table 2-1*.

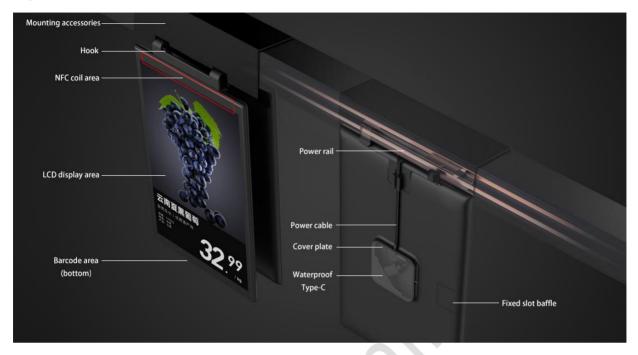


Figure 2-2 Key components of Lumina Aqua-1010

Table 2-1 Key components description for Lumina Aqua-1010

No.	Name	Description			
1	LCD display area	Used to display full-color image and video.			
2	Barcode area	Located at the bottom for pasting an 18-digit ID barcode, as shown in <i>Figure 2-4</i> .			
3	Fixed slot baffle	Removable, and also rotate 90 degrees to install.			
4	Waterproof Type-C	Used for power supply, and also used as a debugging interface.			
5	Cover plate	Used to fix and protect the power cable.			
6	Nameplate area	Located under the cover plate, as shown in Figure 2-4.			
7	Hook	An accessory with a wire groove on the rear for fixing Lumina Aqua-1010 device.			
8	Power cable	One end is a Type-C male, and the other is a rotary terminal connected to a power rail.			
9	Power rail	For Lumina Aqua-1010 power supply.			
10	Hanging accessories	With different sizes available for various installation environments.			
11	NFC coil area	It indicates NFC coil area.			

2.2 Specifications

Table 2-2 lists Lumina Aqua-1010 series specifications.

Table 2-2 Lumina Aqua-1010 series specifications

Dimensions	10.1"			
Hardware spec				
Platform	Allwinner R311			
Way of communication	Wi-Fi - IEEE 802.11 b/g/n			
Working frequency	2.4G ISM band			
Transmit power	Max 17dBm			
Power supply	Active power supply			
Operating voltage	DC 12V			
Working current (mA)	450			
Display size (inch)	10.1			
Size (mm*mm*mm)	151.7*242.7*10.8			
Active display area (mm*mm)	135.36*216.58			
Case color	Black			
Weight (g)	460			
Resolution (pixel)	800*1280			
Viewing angle	≥160°			
Glass protection	2.5D glass screen protector			
Touch	No			
Full-color or not ^[2-1]	Full-color			
Supported image format ^[2-2]	bmp			
Product life	30000 hours			
Protection level	IP65			
Operating temperature	0℃ ~ 50℃			
Storage temperature	0℃ ~ 50℃			
USB port	Support			
Anti-reverse power supply	Support			
Installation mode	Horizontal or vertical installation			

■ Note:

- > [2-1]: Optimal playback format should be 800px*450px in 25 frames per second.
- > [2-2]: An ESL template image ratio is recommended to 4:3.

2.3 Identifying your device

Please identify your device from the following Lumina Aqua-1010 series naming rules.



Figure 2-3 Lumina Aqua-1010 series naming rules

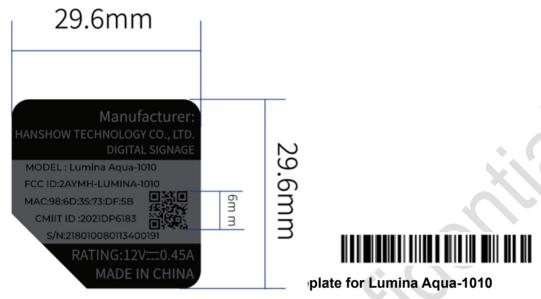
Table 2-3 Lumina Aqua-1010 series naming rules description

Series name	Sub-series name	Screen spec		Functional options	
	Naming	Naming	Description	Naming	Description
Lumina	Aqua	1010	10.1-inch screen	N	Basic version

Example: Lumina Aqua-1010-N means it belongs to Lumina Aqua series, with 10.1-inch and basic version.

2.4 Product ID&nameplate

The product ID and nameplate of Lumina Aqua-1010 series are shown in *Figure 2-4*.



- Product ID: The unique 18-digit ID barcode for each Lumina Aqua-1010.
- Nameplate description:
 - Model: Varies with each type of Lumina Aqua-1010.
 - MAC: The unique and fixed MAC address of Lumina Aqua-1010.
 - CMIIT ID: SRRC certified number.
 - S/N: Same as Product ID.
- Note: The above are for reference only, actual label information may vary.

3 Package and accessories

This chapter describes the package and common accessories of Lumina Aqua-1010 series.

3.1 Package

The Lumina Aqua-1010's series package is a carton with 336mm*270mm*206mm, as shown in *Figure 3-1*.

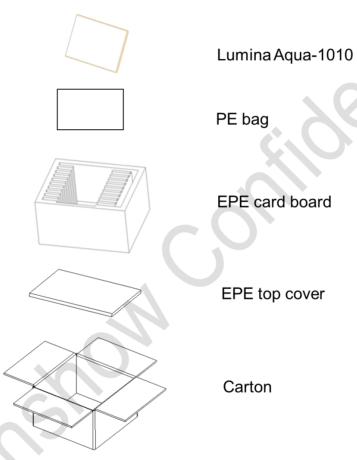


Figure 3-1 Physical package for Lumina Aqua-1010

Note: The Lumina Aqua-1010 devices have been equipped with power cable at the factory. Each one is protected by PE bag, 10 pieces per box.

3.2 Accessories

The common accessories of Lumina Aqua-1010 device installation are shown in *Figure 3-2*.



Figure 3-2 Common accessories for Lumina Aqua-1010 device

4 Application scenarios

Lumina Aqua-1010 series products are available to various areas and shelves of hypermarket, supermarket and retail stores. They are applicable to areas with different fixtures:

- Shelves
- Hooks
- Fences
- Fresh

5 Repair and maintenance

Avoid the following considerations during the use of Lumina Aqua-1010 series:

- Maintain the device in sleep or power off status if the display is not required, to protect the screen.
- The mineral substances in rainwater, moisture or liquids may corrode the electronic circuit. If the device is wetted, please dry it quickly.
- Do not use or store the device in the dusty or dirty place where the removable parts and electronic components may be damaged.
- Avoid dropping or tossing the devices.
- Avoid direct contact with chemical detergent.
- If the product is not in use for a long period of time, cut off the power supply.
- Clean the device with a dry or damp soft cloth instead of wet cloth. Do not clean the device with liquid directly.
- Unauthorized disassembly of the device will affect the waterproof rating.

6 FCC ID warning

6.1 Warning for nameplate

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

6.2 Warning for product manual

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The distance between user and device should be no less than 20cm.