

ES10 Specification

Sending Card Series

Version: v1.1

Release Date: April 2025



Revision History

Version Number	Summary of the revisions	Revision Date	Revised by
V 1.1	Update function description and layout	2025/04/15	Zhang Yongjie
V 1.0	Initial release	2024/09/18	Zhang Yongjie

Product Overview

ES10 is a high-performance transmitter with powerful loading capacity and rich functions. A single device supports 1*HDMI2.0 and 2*DVI inputs, and supports a maximum of 4096x2160@60Hz input. It supports 10 network port outputs and supports a maximum of 6.5 million pixels.

The device uses a square USB/Gigabit Ethernet port to communicate with the PC, and uses the Gigabit Ethernet port for device cascade control. It supports passive correction, 3D display, network port redundancy backup and other functions, and is mainly used in rental and fixed installation fields, such as concerts, stadium events, conference rooms, exhibitions, etc.

Product Certification

RoHS certification, CCC certification

Note: If the product has no relevant certification in any country or region, please contact Kystar immediately for confirmation or processing. Otherwise, if any legal risks are caused, the customer shall bear them by himself or Kystar shall have the right to seek compensation.



Features

- Supports 1*HDMI2.0 and 2*DVI inputs.
- Support HDMI loop-out cascade.
 Only HDMI input can be looped out, maximum cascade 8 units
- Supports 10 Gigabit Ethernet ports.
 Single Ethernet port supports 650,000 pixels, the whole machine supports up to 6.5 million pixels, the maximum width of a single unit is 8000, and the maximum is 8000
- Support EDID management.
 - HDMI maximum input resolution 4096X2160@60Hz, can be customized within this pixel point, maximum width 8000, maximum height 8000
 - DVI maximum input resolution 2048x1152@60Hz, can be customized within this pixel point, maximum width 4000, maximum height 4000
- Supports passive brightness and color correction.
 With the Kystar correction system, it can be separated from the video source, complete the brightness and color correction of each light point, eliminate the brightness and color differences, and ensure the consistency of the whole screen display effect
- Rapid delivery of calibration data.
 Supports Kystar's rapid delivery of calibration data technology, which is twice as fast as traditional methods and greatly improves calibration efficiency.
- Supports multiple control methods.
 The device supports USB/Gigabit connection to the host computer for debugging
- Support cascade control.
 Devices can be uniformly controlled through Gigabit cascade, with a maximum of 8 cascades



- Support 3D display (load is halved).
 Use 3D transmitter and 3D glasses to achieve 3D display effect
- Support brightness and color temperature adjustment.

Panel Description



*The product images in this article are for reference only. Please refer to the actual product purchased.

Serial Number	Functional Description
1	Power switch
2	Equipment indicator light, green light, RUN, running status indicator light; red light, PWR, power supply status indicator light

Port Specifications



Input Port		
Туре	QTY	Specification
DVI	2	Maximum support 2048*1152@60Hz



		 Support custom resolution Maximum width: 4000 (4000x540@60Hz) Maximum height: 4000 (540x4000@60Hz) Does not support interlaced signals
HDMI2.0	1	 Maximum support 4096*2160@60Hz Support custom resolution Maximum width: 8000 (8000x1000@60Hz) Maximum height: 8000 (1000x8000@60H z) Support HDCP1.4/2.2 Supported color space: RGB4:4:4/YCbCr4:4:4/ YCbCr4:2:2 Support embedded audio analysis Does not support interlaced signals
AUDIO-IN	1	3.5mm audio input interface

Output Port		
Туре	QTY	Illustrate
LAN	10	Single port supports up to 650,000 pixels, supports hot backup
HDMI2.0	1	HDMI2.0, loop-through HDMI input
3D-SYNC	1	3D sync signal output

Control Port		
Туре	QTY	Illustrate
USB-IN	1	USB serial port, communicate with host computer software, control sending card

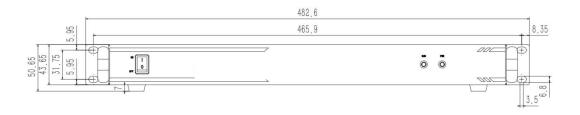


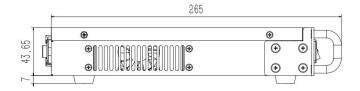
USB-OUT	1	Function reserved port
ETH-100M	1	100M Ethernet port, connect to the central control for central control debugging
CFG-1G	2	Gigabit network port, communicate with host computer software, control sending card, and support cascade control

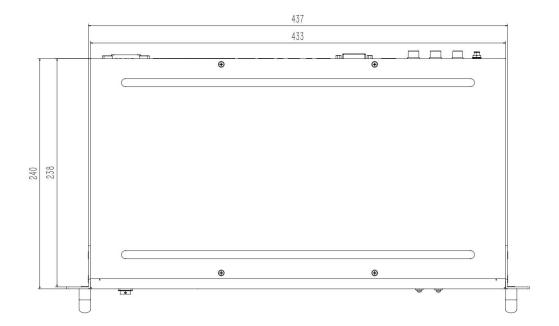
Other Ports		
Туре	QTY	Illustrate
LIGHT SENSOR	1	Brightness sensor, collects light information and automatically controls brightness
UART IN	1	Serial port, can be connected to the central control device for device control
UART OUT	1	Serial port cascade output



Size







Unit: mm , tolerance ±0.3mm



Equipment Specifications

Specification		
Input voltage	AC 100-240V 50/60Hz	
Power consumption	36W	
Operating temperature	0 ℃ -45℃	
Operating humidity	10% - 95%, non-condensing	
Storage temperature	-20℃- 75℃	
Storage humidity	10% - 95%, non-condensing	
Single unit specifications	482.6x265x50.65mm (L x W x H)	
Net weight	2.9KG	
Carton size	550x90x335 (L x W x H)	
Gross Weight	3.96KG	
Accessories	1x power cable, 1x network cable, 1x USB cable, 1x HDMI cable, 1x DVI cable, 1x certificate, 1x packing list	



Copyright Notice

Copyright © 2025 Beijing Kystar Technology Co., Ltd. All rights reserved.

Without the written permission of our company, no organization or individual may excerpt or copy part or all of the contents of this document without authorization, and may not disseminate it in any form.



Trademark Notice It is a registered trademark of Beijing Kystar.

Statement

Welcome to choose the products of Beijing Kystar Technology Co., Ltd. We are very pleased if this document helps and facilitates you to understand and use the products. We strive to be accurate and reliable when writing documents, and may modify or change the content at any time without prior notice. If you encounter any problems during use or have good suggestions, please contact us according to the contact information provided in the document. We will try our best to support you with the problems you encounter during use. We sincerely thank you for your suggestions and will evaluate and adopt them as soon as possible.



Beijing KystarTechnology Co., Ltd.

A professional provider of comprehensive solutions and operation services for ultra-high-definition video display and control.

Sales@kvstar.net www.kystar.com.cn/en | www.kommander.com.cn/en