



# PRODUCT CATALOG

# 2022

## AVMATRIX®

Multiformat Video Switcher

PTZ Camera  
Matrix Switcher  
USB Capture  
Video Encoder  
Multiviewer  
Fiber Optic Extender  
Video Signal Converter  
Video Signal Generator  
Distribution Amplifier



[avmatrix.com](http://avmatrix.com)

Note: due to constant effort to improve products and product features, specifications may change without notice.

**AVMATRIX®**  
[www.avmatrix.com](http://www.avmatrix.com)

# VIDEO SWITCHER

Seamless Multi-format video switcher with audio mixer, chroma/luma key, PoP/PIP, and USB capture out for live streaming.



## MULTI-FORMAT

Inputs signal is auto-detected while PGM output can be scaled, which is compatible with more different equipments and more flexible in various applications. They can be used in wide variety of venues for events, seminars, etc.

## VIDEO SWITCHER

### Model NO. ▶ HVSO402U

#### MICRO 4CH STREAMING SWITCHER

##### Feature

- 4 channel auto-detected HDMI inputs
- 1×HDMI PGM output & multiview out
- 1×USB type-C output for capturing and streaming
- AUX output configurable and assignable
- Clearly visible multiview & status page
- Upstream key: Luma key, Chroma key, PIP×2/ POP
- Downstream key and LOGO overlay
- T-bar/ Auto/ Cut transitions
- various effects: WIPE(9×2 patterns) / MIX/ DIP
- Audio mixer: HDMI audio and 2-Ch MIC/ line In
- Audio delay available
- 49 default patterns, 2 color generators
- 16 captured images, 16 imported images
- LAN port for PC software remote control
- FTB/ MUTE/ STILL/ GPIO for tally
- Customer configuration import and export



HDMI USB 2.0

### Model NO. ▶ HVSO401E

#### MICRO 4CH STREAMING SWITCHER

##### Feature

- Inputs 1 to 3: HDMI, Input 4: HDMI or DP
- Outputs: 1×HDMI PGM, 1×HDMI multiview
- Recording & RTMP streaming
- USB capture video (UVC) for live streaming
- Auto/ Cut transitions and Mix / Fade / Wipe effects
- PIP function, adjustable size and position
- Audio mixer: 3.5mm stereo / RCA audio & HDMI
- GPIO interface for live tally system
- FTB for emergency situation



HDMI DP USB 2.0

## VIDEO SWITCHER



### Model NO. PVS0403U 4CH PORTABLE VIDEO SWITCHER

#### Feature

- 10.1 inch FHD IPS LCD monitor
- Input: 2×HDMI and 2×3G-SDI
- Output: 2×HDMI PGM, 1× Multiview, 1×USB type-C
- All outputs are configurable and assignable
- USB for capturing and streaming on PC
- Upstream key: Luma key, Chroma key, PIP×2/ POP
- Downstream key and LOGO overlay
- T-Bar/ Auto/ Cut transitions
- Audio mixer: 2×SDI, 2×HDMI audio & 2×MIC/line In
- Audio delay available
- 39 default patterns, 16 imported images
- 16 captured images, 2 color generators
- LAN port for PC software remote control
- FTB/ MUTE/ STILL effects
- GPIO port for tally system

3G-SDI HDMI USB 3.0



### Model NO. HVS0403U 4CH SDI&HDMI VIDEO SWITCHER

#### Feature

- Input: 2×HDMI and 2×3G-SDI
- Output: 2×HDMI PGM, 1× Multiview, 1×USB type-C
- All outputs are configurable and assignable
- USB for capturing and streaming
- Clearly visible multiview & status page
- Upstream key: Luma key, Chroma key, 2×PIP/ POP
- Downstream key and LOGO overlay
- T-Bar/ AUTO/ CUT transitions
- Audio mixer: 2×SDI, 2×HDMI audio & 2×MIC/ line In
- Audio delay available
- 39 default patterns, 16 imported images
- 16 captured images, 2 color generators
- LAN port for PC software remote control
- FTB/ MUTE/ STILL effects
- GPIO port for tally system

3G-SDI HDMI USB 3.0

## VIDEO SWITCHER



### Model NO. PVS0615U 6CH PORTABLE VIDEO SWITCHER

#### Feature

- Portable All-In-One design
- 15.6 inch FHD LCD display
- Uncompressed USB capture for streaming
- Input: 4×SDI and 2×DVI-I/ HDMI/ VGA/ USB player
- PGM Output: 3×SDI(1×PWV), 2×HDMI
- Multiview output: 1×HDMI
- Auto-detected multi-format inputs
- Output format selectable
- T-Bar/ AUTO/ CUT transitions
- MIX/ FADE/ WIPE/ FTB effects
- Luma Key/ Chroma Key for virtual studio
- PIP/ POP window size and position adjustable
- Record PGM video to SD card, up to 1080p60
- Audio mixer: TRS audio & SDI, HDMI, USB audio
- GPIO port for tally system

3G-SDI HDMI DVI VGA USB 3.0



### Model NO. VS0605U 6CH MULTIFORMAT VIDEO SWITCHER

#### Feature

- Uncompressed USB capture for streaming
- Input: 4×SDI and 2×DVI-I/ HDMI/ VGA/ USB player
- Output: 2×SDI & 1×HDMI PGM, 1×SDI PWV
- Multiview output: 1×SDI and 1×HDMI
- Input format auto-detected
- Output format selectable
- PTZ camera control: Visca & Pelco protocol
- T-Bar/ AUTO/ CUT transitions
- MIX/ FADE/ WIPE effects
- Luma Key/ Chroma Key for virtual studio
- PIP/ POP window size and position adjustable
- Record PGM video to SD card, up to 1080p60
- Audio mixer: XLR/RCA & SDI, HDMI, USB audio
- GPIO port for tally system

3G-SDI HDMI DVI VGA USB 3.0

## VIDEO SWITCHER



Model NO. **PVS0613U**  
**6CH PORTABLE VIDEO SWITCHER**

### Feature

- Portable All-in-One design
- 13.3 inch FHD LCD display
- Uncompressed USB capture for streaming
- Input: 4×SDI and 2×HDMI
- Output: 2×SDI PGM, 1×HDMI PGM, 1×SDI PWW
- Multiview output: 1×SDI and 1×HDM
- Auto-detected multi-format inputs
- Output format selectable
- T-Bar/ AUTO/ CUT transitions
- MIX/ FADE/ WIPE/ FTB effects
- PIP/ POP window size and position adjustable
- Audio mixer: 3.5mm/ RCA & SDI/ HDMI audio
- GPIO port for tally system

**3G-SDI** **HDMI** **USB 3.0**

## VIDEO SWITCHER



Model NO. **VS0601U**  
**6CH MULTIFORMAT VIDEO SWITCHER**

### Feature

- Uncompressed USB capture for streaming
- Input: 4×SDI and 2×HDMI
- Output: 2×SDI PGM, 1×HDMI PGM, 1×SDI PWW
- Multiview output: 1×SDI and 1×HDM
- Auto-detected multi-format inputs
- Output format selectable
- T-Bar/ AUTO/ CUT transitions
- MIX/ FADE/ WIPE/ FTB effects
- PIP/ POP window size and position adjustable
- Audio mixer: 3.5mm/ RCA & SDI/ HDMI audio
- GPIO port for tally system

**3G-SDI** **HDMI** **USB 3.0**

# USB CAPTURE DEVICES

USB capture series are professional devices to capture uncompressed SDI or HDMI signal over USB for graphics capture, streaming, recording on your PC or Mac.



## UNCOMPRESSED CAPTURE

USB capture products support drive-free and power-free. And it supports the output of uncompressed USB3.0 YUY2 high-quality images, convenient for applications in various fields such as broadcasting, live streaming, medical education, and video conferencing.

## USB CAPTURE

Model NO. ➔ **UC2018**

**SDI/HDMI USB3.1 GEN1 CAPTURE BOX**

### Feature

- Plug-and-Play, driver free & power free
- SDI/HDMI in, and USB 3.1 Gen1(USB3.0) out
- 3.5mm line audio in
- Automatic input signal detection, up to 1080p60
- Uncompressed via USB 3.1 Gen1(USB3.0)
- UVC video capture and YUY2 video output
- UAC audio out from HDMI audio or line in
- Compatible with Windows, Linux, macOS
- Compatible with OBS, ZOOM, Teams & Twitch, etc.



**3G-SDI** **HDMI** **USB 3.0**

Model NO. ➔ **UC1118**

**SDI TO USB3.1 GEN1 CAPTURE BOX**

### Feature

- Plug-and-Play, driver free & power free
- SDI in, and USB 3.1 Gen1(USB3.0) out
- 3.5mm line audio in
- Automatic input signal detection, up to 1080p60
- Uncompressed via USB 3.1 Gen1(USB3.0)
- UVC video capture and YUY2 video output
- UAC audio out from HDMI audio or line in
- Compatible with Windows, Linux, macOS
- Compatible with OBS, ZOOM, Teams & Twitch, etc.



**3G-SDI** **USB 3.0**

Model NO. ➔ **UC1218**

**HDMI USB3.1 GEN1 CAPTURE BOX**

### Feature

- Plug-and-Play, driver free & power free
- HDMI in, and USB 3.1 Gen1(USB3.0) out
- 3.5mm line audio in
- Automatic input signal detection, up to 1080p60
- Uncompressed via USB 3.1 Gen1(USB3.0)
- UVC video capture and YUY2 video output
- UAC audio out from HDMI audio or line in
- Compatible with Windows, Linux, macOS
- Compatible with OBS, ZOOM, Teams & Twitch, etc.



**HDMI** **USB 3.0**

# PCI-E CAPTURE DEVICES

PCI-E capture series are professional devices to capture uncompressed SDI or HDMI signal over PCI-E for graphics capture, streaming, recording on your PC.



## UNCOMPRESSED CAPTURE

PCI-E capture card supports inputs and capture, and compatible with console or PC games and digital cameras. Transfer bandwidth up to 2.5GB/S, it can meet the needs of high-bandwidth, high-performance image acquisition and processing applications, ideal for use in live streaming platforms.

## PCI-E CAPTURE

Model NO. ➔ **VC12-4K**

**4K HDMI PCI-E CAPTURE CARD**

### Feature

- 1-CH HDMI 2.0 input loop-out
- Input and capture support up to 4K60
- Bit Rates up to 800Mbps
- Support YUY2 uncompressed video
- PCIe GEN2x4, 2.5GB/S transfer bandwidth
- Support Win 7 and above, Linux 18.04 and above
- Compatible with OBS/PotPlayer/XSplit, etc.
- Stable operation, 24 hours non-stop work
- Support one machine with multiple cards

**4K HDMI 2.0**



Model NO. ➔ **VC42**

**4-CH HDMI PCI-E CAPTURE CARD**

### Feature

- 4-CH HDMI simultaneous input and capture
- Capture up to 1080p60, bit rate up to 200Mbps
- Support YUY2 uncompressed video
- PCIe GEN2x4, 2.5GB/S transfer bandwidth
- Support portrait and landscape mode
- Support Win 7 and above, Linux 18.04 and above
- Compatible with OBS/PotPlayer/XSplit, etc.
- Stable operation, 24 hours non-stop work
- Support one machine with multiple cards

**HDMI**



Model NO. ➔ **VC41**

**4-CH 3G-SDI PCI-E CAPTURE CARD**

### Feature

- 4-CH 3G-SDI simultaneous input and capture
- Capture up to 1080p60, bit rate up to 200Mbps
- Support YUY2 uncompressed video
- PCIe GEN2x4, 2.5GB/S transfer bandwidth
- Support portrait and landscape mode
- Support Win 7 and above, Linux 18.04 and above
- Compatible with OBS/PotPlayer/XSplit, etc.
- Stable operation, 24 hours non-stop work
- Support one machine with multiple cards

**3G-SDI**

# STREAMING ENCODER

The encoder can transmit video signals directly to various live streaming platforms over the network without the need for a smart phone or computer.



## STREAMING MEDIA PROTOCOL

Encoder supports H.265/H.264 streaming encoding protocols up to 1080p60hz, and streaming protocols: RTSP, RTP, RTMPs, RTMP, HTTP, UDP, SRT, unicast and multicast.

## STREAMING ENCODER

Model NO. **SE1217**

**H.265/264 HDMI STREAMING ENCODER**

### Feature

- 1×HDMI input, 1×HDMI loop out, 1×Analog audio input
- H.265/264 stream encode protocol, up to 1080p60hz
- Dual-stream (main stream and sub stream)
- RTSP, RTMPs, RTMP, HTTP, SRT, unicast, multicast
- Video and audio streaming or single audio streaming
- Image and text overlay
- Mirror image & upside-down image
- Live stream with no need for connecting a computer



## HDMI LAN

Model NO. **SE1117**

**H.265/264 SDI STREAMING ENCODER**

### Feature

- 1×SDI input, 1×SDI loop out, 1×Analog audio input
- H.265/264 stream encode protocol, up to 1080p60hz
- Dual-stream (main stream and sub stream)
- RTSP, RTMPs, RTMP, HTTP, SRT, unicast, multicast
- Video and audio streaming or single audio streaming
- Image and text overlay
- Mirror image & upside-down image
- Live stream with no need for connecting a computer



## 3G-SDI LAN



# FULL HD PTZ CAMERA

AVMATRIX PTZ Cameras are industry's advanced live streaming pan, tilt, and zoom network connected cameras. Built for quality, made for professional video productions.



## VARIOUS APPLICATIONS

PTZ cameras are used to produce video content for a variety of applications. Here is a short list of examples:

- Video Communications (Meetings, Webinars, Telemedicine, Distance Learning)
- Live Video Production (Events, Conferences, Studios)
- Live Streaming (Church Services, Product Launches, Sporting Events)

## PTZ CAMERA & CONTROLLER



Model NO: **PTZ1271**

**FULL HD HDMI/ SDI PTZ CAMERA**

### Feature

- 20x/30x optical zoom lens for option
- HDMI, 3G-SDI, & LAN output
- Control protocol: VISCA, PELCO-D/I-P & Onvif
- LAN port for video stream: RTMP, RTSP & Onvif
- 3.5mm stereo audio(line-level) in
- Optional: PoE (Power Over Ethernet) & NDI | HX

**3G-SDI** **HDMI** **LAN**



Model NO: **PKC3000**

**IP PTZ CAMERA CONTROLLER**

### Feature

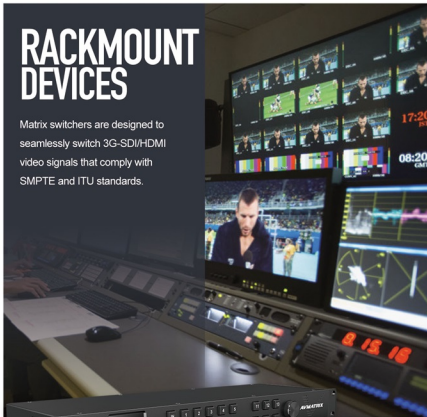
- VISCA/VISCA Over IP/Pelco P&D/ONVIF protocols
- Support RS-422/RS-485/RS-232/IP control
- Automatically search and Assign IP addresses easily
- Control up to 255 IP cameras on a single network
- Metal housing with LCD display and 4D joystick
- 6 user-assignable keys to quickly invoke functions
- Quick control exposure/iris/focus/pan/tilt, etc
- Supports POE and 12V DC power supplies

**RS-422** **RS-485** **RS-232** **IP**



# RACKMOUNT DEVICES

Matrix switchers are designed to seamlessly switch 3G-SDI/HDMI video signals that comply with SMPTE and ITU standards.



## COMPACT DESIGN

Unique and compact design, supports dual power redundancy, as well as easy installation in standard cabinets. Widely used in server room and PRO AV projects.

## MULTVIEWER & MATRIX

### Model NO. ▶ MMV1630

#### 16CH SDI MULTVIEWER & SWITCHER

##### Feature

- 16CH multiviewer mode and 16x16 switcher mode
- Switcher input: 16x3G-SDI
- Switcher output: 16x3G-SDI
- Multiviewer output: 2x3G-SDI & 1xHDMI
- SDI input signal auto detection & equalization
- Full screen, and 20 preset multiviewer layouts
- Time code, UMD, signal status and audio meter
- Front panel buttons and knob control with LCD
- Dual power design, redundant power
- Free PC software control: LAN, RS-422

3G-SDI HDMI

### Model NO. ▶ MSS1611-S

#### 16x16 SEAMLESS MATRIX SWITCHER

##### Feature

- Input: 16x3G-SDI
- Output: 16x3G-SDI
- Seamless switching
- SDI input signal auto detection & equalization
- Free PC software control: LAN, RS-422
- Front panel buttons and knob control with LCD
- Dual power design, redundant power

3G-SDI

### Model NO. ▶ MSS0811

#### 8x8 SDI MATRIX SWITCHER

##### Feature

- Input: 8x3G-SDI
- Output: 8x3G-SDI
- SDI input signal auto detection & equalization
- Pass all ancillary data and embedded audio
- DVB-ASI interface compatible
- Free PC software control: LAN, RS-232
- Front panel buttons and knob control with LCD
- USB for keyboard control
- Dual power design, redundant power

3G-SDI

# BROADCAST BOX SERIES

AVMATRIX focus on developing and manufacturing pro video processing devices, including video switcher, converter, multi-viewer, optical fiber extender, distribution amplifier, matrix switcher and signal generator, etc.



## VARIOUS APPLICATIONS

AVMATRIX products are widely used in broadcast television, video conference, digital medical, security, education, industry and other video applications.

## 4K CONVERTER & EXTENDER



Model NO. ➔ **SD1151-12G**

**1x5 12G-SDI DISTRIBUTION AMPLIFIER**

### Feature

- Input: 1x12G-SDI
- Output: 5x12G-SDI, 1xSFP(optional)
- Automatically detects SD, HD, 3G, 6G and 12G-SDI
- Support DVB-ASI signal
- Automatic cable equalization and signal retiming
- Pass all ancillary data and embedded audio
- 12V DC power supply
- Detachable bracket design for wall mounting

**12G-SDI FIBER**



Model NO. ➔ **SD1121-12G**

**1x2 12G-SDI DISTRIBUTION AMPLIFIER**

### Feature

- Input: 1x12G-SDI
- Output: 2x12G-SDI
- Automatically detects SD, HD, 3G, 6G and 12G-SDI
- Support DVB-ASI signal
- Automatic cable equalization and signal retiming
- Pass all ancillary data and embedded audio
- 5V USB power supply
- Detachable bracket design for wall mounting

**12G-SDI**



Model NO. ➔ **FE1121-12G**

**12G-SDI FIBER OPTIC EXTENDER**

### Feature

- 12G-SDI input & loopout on transmitter
- Dual 12G-SDI outputs on receiver
- Automatically detects SD, HD, 3G, 6G and 12G-SDI
- 10km transmission distance
- SFP/ LC fiber transmitter & receiver
- Automatic cable equalization and signal retiming
- 5V USB power supply
- Detachable bracket design for wall mounting

**12G-SDI FIBER**

## CONVERTER



Model NO. **SC2030**  
**3G-SDI/HDMI CROSS CONVERTER**

**Feature**

- Input: 1×HDMI/ 3G-SDI, 1×analog audio
- Output: 2×3G-SDI, 1×HDMI
- Up/down scaling and frame rate conversion
- Input signal automatic detection and configuration
- Analog audio Embedding
- Control easily via the DIP switches & PC software
- USB /Dual threaded DC power supply
- Detachable bracket design for wall mounting

**3G-SDI** **HDMI**



Model NO. **Mini SC1112**  
**3G-SDI TO HDMI MINI CONVERTER**

**Feature**

- Input: 1×3G-SDI
- Output: 1×HDMI, 1×3G-SDI loop
- Input signal automatic detection and configuration
- LED indicators for power and state of input signal
- USB power supply
- Detachable bracket design for wall mounting

**3G-SDI** **HDMI**



Model NO. **Mini SC1221**  
**HDMI TO 3G-SDI MIN CONVERTER**

**Feature**

- Input: 1×HDMI
- Output: 2×3G-SDI
- Input signal automatic detection and configuration
- LED indicators for power and state of input signal
- USB power supply
- Detachable bracket design for wall mounting

**3G-SDI** **HDMI**

## CONVERTER&MULTVIEWER



Model NO. **SC1120**  
**3G-SDI TO HDMI SCALING CONVERTER**

**Feature**

- Input: 1×SDI, 1×All SDI, 1×AES, 1×audio
- Output: 1×SDI loop, 1×HDMI, 1×AV, 1×AES, 1×audio
- Up/down scaling and frame rate conversion
- AES or analog audio embedding & de-embedding
- Input signal automatic detection and configuration
- Control easily via the DIP switches
- Remote control for PC via USB
- Detachable bracket design for wall mounting

**3G-SDI** **HDMI** **AV**



Model NO. **SC2031**  
**HDMI TO 3G-SDI SCALING CONVERTER**

**Feature**

- Input: 1×HDMI, 1×AV, 1×AES/EBU, 1×analog audio
- Output: 3×3G-SDI, 1×AES/EBU, 1×analog audio
- Up/down scaling and frame rate conversion
- AES or analog audio embedding & de-embedding
- Input signal automatic detection and configuration
- Control easily via the DIP switches
- Remote control for PC via USB
- Detachable bracket design for wall mounting

**3G-SDI** **HDMI** **AV**



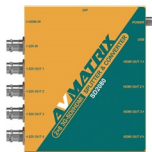
Model NO. **MV0430**  
**4CH 3G-SDI MULTIVIEWER**

**Feature**

- Input: 4×3G-SDI
- Output: 2×3G-SDI and 2×HDMI multi-view
- 11 selectable SDI & HDMI output formats
- 16 preset layouts, full-screen & multi-view mode
- 11 character UMD overlay, custom position & color
- Audio level meter overlay, support custom position
- Control via the DIP, USB keyboard and PC
- 12V DC power supply
- Detachable bracket design for wall mounting

**3G-SDI** **HDMI**

## DISTRIBUTOR



### Model NO.: SD2080

#### 2x8 SD/HDMI SPLITTER & CONVERTER

##### Feature

- Input: 1xHDMI/1x3G-SDI
- Output: 4x3G-SDI, 4xHDMI
- Distribute and convert between SDI & HDMI
- Input signal automatic detection and configuration
- Input and output support up to 1080p60
- Control easily via DIP switches
- USB and threaded locking power supply
- Detachable bracket design for wall mounting

3G-SDI HDMI



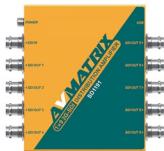
### Model NO.: SD1141

#### 1x4 3G-SDI DISTRIBUTION AMPLIFIER

##### Feature

- Input: 1x3G-SDI
- Output: 4x3G-SDI
- Automatically detects SD, HD and 3G-SDI
- Output 2 & 4 support DVB-ASI signal
- Automatic cable equalization and signal retiming
- Pass all ancillary data and embedded audio
- LED indicators for power and signal lock
- USB/DC power supply
- Detachable bracket design for wall mounting

3G-SDI



### Model NO.: SD1191

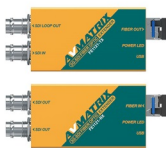
#### 1x9 3G-SDI DISTRIBUTION AMPLIFIER

##### Feature

- Input: 1x3G-SDI
- Output: 9x3G-SDI
- Automatically detects SD, HD and 3G-SDI
- Support DVB-ASI signal
- Automatic cable equalization and signal retiming
- Pass all ancillary data and embedded audio
- LED indicators for power and signal lock
- USB/DC power supply
- Detachable bracket design for wall mounting

3G-SDI

## EXTENDER & GENERATOR



### Model NO.: FE1121

#### 3G-SDI FIBER OPTIC EXTENDER

##### Feature

- 3G-SDI input & loopout on transmitter
- Dual 3G-SDI outputs on receiver
- SDI equalization and re-clocking
- Support 3Gbit Level A and Level B (all formats)
- 20km transmission distance
- SFP/LC Fiber transmitter & receiver
- USB power supply
- Detachable bracket design for wall mounting

3G-SDI FIBER



### Model NO.: PG4K

#### 12G-SDI/HDMI2.0 SIGNAL GENERATOR

##### Feature

- 12G-SDI single link, dual link, quad link (SQD/ 2SI)
- Support 6G-SDI, 3G-SDI level A and level B
- Support 4k HDMI2.0 video outputs
- Support 12G-SDI fiber signal (SFP optional)
- 16-Channel SDI audio generation
- Built-in patterns: Color bar, pathology patterns
- USB Port for import the patterns
- time code, frame counter test and moving test
- REF in for frame synchronization

12G-SDI HDMI2.0 FIBER



### Model NO.: TS3019

#### WIRELESS TALLY SYSTEM

##### Features

- Transmission distance up to 200m in open space
- Transmitter with GPIO/USB/RS-232
- Compatible with video switcher, Vmix, etc.
- Supports up to 12 tally lights
- Support wireless/wired tally connection
- RS232 wireless transmission for PTZ control
- USB or 18650 lithium battery power supply
- Red/Green dual-color light and 4 brightness levels
- Supports signal strength and power status display
- Receiver light with hotshoe 1/4 inch hole