



Specification



Introduction

EZCast ProAV is the latest Display-over-IP product we designed for ProAV market. The WT01 and WR01 comes with a pair of powerful and high sensitive antennas to bring you long range HDMI extension over 802.11ac WiFi standard with up to 1080p@60fps. It's a plug & play product without any complicated setting needed, furthermore, it supports USB reverse control for Keyboard/Mouse to achieve KVM function but wirelessly. You can also easily broadcast video from 1 transmitter to many receivers or matrix features with minimum cost.

System Requirement:

- Device support: Any device with HDMI 1.4

Features:

- Audio/Video transmission over IP with Low latency
- 802.11ac 2T2R high power antennas for long range
- Gigabit ethernet supported
- Built-in on-chip hardware video encoder for Full HD video with 60fps
- USB 2.0 Host for HID devices
- KVM mode and 1-to-many Splitter mode
- Support many-to-many Matrix function
- HDMI lookback display for local monitoring (WT01 only)

Receiver (WR01) Spec:

CPU	1Ghz Dual Core CPU
Output Resolution	Support Auto EDID passthrough ● 800x600@60hz ● 1024x768@60hz ● 1280x720@60hz ● 1280x768@60hz ● 1280x800@60hz ● 1280x960@60hz ● 1280x1024@60hz ● 1400x1050@60hz ● 1440x900@60hz ● 1600x1200@60hz ● 1680x1050@60hz ● 1920x1080@60hz ● 1920x1200@60hz
I/O	● HDMI out (HDMI1.4) ● USB type A (USB 2.0) x2 ● DC-in

	● Aux out ● IR-in ● RJ-45 ● RS-232
Ethernet	10/100/1000M high speed ethernet
WiFi	802.11ac 2T2R, max. bandwidth 866Mbps (5Ghz)
WiFi Frequency	5Ghz: 5.150Ghz~5.825Ghz (*supported band may vary in different countries)
Power	DC 12V, 1A
HDCP	HDCP1.4
LED Indication	Power, Link, Status, Mode, ID indication
Key	Mode button, ID Switch button, Device Mode Switch, Reset
Power Consumption	12W
Working Temp.	0~40°C
Storage Temp.	-20~70°C

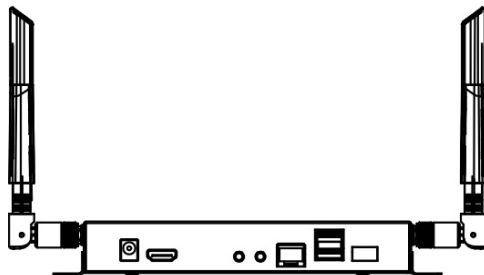
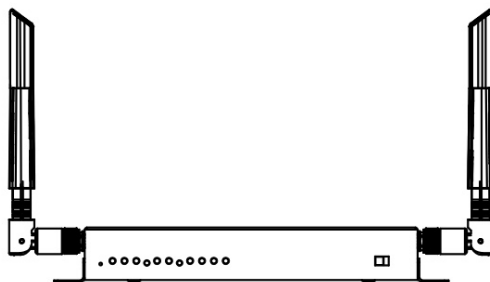
Transmitter (WT01) Spec:

CPU	1Ghz RISC CPU
Input Resolution	HDMI Input: ● 640x480@60hz ● 800x600@60hz ● 1024x768@60hz ● 1280x720@50hz/60hz ● 1280x768@60hz ● 1280x800@60hz ● 1280x960@60hz ● 1280x1024@60hz ● 1360x768@60hz ● 1400x1050@60hz ● 1440x900@60hz ● 1600x1200@60hz ● 1680x1050@60hz ● 1920x1080i@50hz/60hz ● 1920x1080@50hz/60hz ● 1920x1200@60hz HDMI lookback output: ● Same as above except interlacing timing
I/O	● HDMI in (HDMI1.4) ● HDMI out (HDMI1.4) ● USB type A (USB 2.0) ● DC-in ● Aux out

	● IR-in ● RJ-45 ● RS-232
Ethernet	10/100/1000M high speed ethernet
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Power	DC 12V, 1A
HDCP	HDCP1.4
LED Indication	● Power ● Link ● Status ● Mode ● ID indication
Key	● Mode button ● ID Switch button ● Reset
Power Consumption	12W
Working Temp.	0~40°C
Storage Temp.	-20~70°C

Dimension (WR01/WT01):

- L 170mm x W 65mm x H2 7mm



Weight:

- 280g approx. (without Antenna).
- 305g approx.. (with Antennas).

*Tx and Rx are the same weight.

Installation Guide:

1 Tx to 1 Rx:

- Switch Rx's device mode to 『SP』 mode
- Connect Power with the adaptor for Tx and Rx
- Use HDMI A male-to-male cable to pair Tx and Rx
- Connect Rx's HDMI port output to HDMI projectors or displays.
- Connect HDMI source to Tx, and make sure the Tx and Rx's ID LED is the same
- If you need to monitor the transmitting content, you can connect another monitor/projector to Tx 's HDMI out for lookback locally.

1 Tx to Multiple Rx:

- Switch Rx's device mode to 『SW』 mode
- Connect Power with the adaptor for Tx and Rx
- Use USB A male-to-male cable to pair Tx and Rx
- Connect Rx's HDMI port output to HDMI projectors or displays.
- Connect HDMI source to Tx, and make sure all Rx's ID LED is the same
- If you need to monitor the transmitting content, you can connect another monitor/projector to Tx 's HDMI out for lookback locally.

[For more operations, please check the user's manual.](#)

***Notice: Due to WiFi signal requires enough space, please DO NOT block the antenna or mount it behind of TV/Panel.**

I/O Descriptions:

WR01 Receiver	FRONT  REAR 
WT01 Transmitter	REAR 

LED Indication:

WT01/WR01	
	RST PWR LINK STA MODE 1 2 ID 1 2 4 8

WiFi Channel Table (5Ghz, 20Mhz):

Band range	Operating Channel Numbers	Channel center frequencies(MHz)
5180 MHz~5240MHz	36	5180
	40	5200
	44	5220
	48	5240
5260MHz~5320MHz	52	5260
	56	5280
	60	5300
	64	5320
5550MHz~5700MHz	100	5500
	104	5520
	108	5540
	112	5560
	116	5580
	120	5600
	124	5620
	128	5640
	132	5660
	136	5680
	140	5700
5745MHz~5825MHz	149	5745
	153	5765
	157	5785
	161	5805
	165	5825

***please be noted some WiFi channels might be prohibited in different countries.**

WiFi RF Parameters (5Ghz):

Feature	Description
WLAN Standard	IEEE 802.11a/n 2x2, WiFi compliant
Frequency Range	4.900 GHz ~ 5.845 GHz (5.0 GHz ISM Band)
Number of Channels	5.0GHz: Please see the table ¹
Output Power	802.11a /54Mbps : 17 dBm $\pm$ 1.5 dB @ EVM $\leq$ -25dB
	802.11n /MCS7 : 16 dBm $\pm$ 1.5 dB @ EVM $\leq$ -28dB
	802.11ac /MCS9 : 15 dBm $\pm$ 1.5 dB @ EVM $\leq$ -32dB
SISO Receive Sensitivity (11a,20MHz) @10% PER	- 6Mbps PER @ -92 dBm, typical
	- 9Mbps PER @ -92 dBm, typical
	- 12Mbps PER @ -92 dBm, typical
	- 18Mbps PER @ -91 dBm, typical
	- 24Mbps PER @ -88 dBm, typical
	- 36Mbps PER @ -85 dBm, typical
	- 48Mbps PER @ -80 dBm, typical
	- 54Mbps PER @ -78 dBm, typical
MIMO Receive Sensitivity (11a,20MHz) @10% PER	- 6Mbps PER @ -92 dBm, typical
	- 9Mbps PER @ -92 dBm, typical
	- 12Mbps PER @ -92 dBm, typical
	- 18Mbps PER @ -92 dBm, typical
	- 24Mbps PER @ -91 dBm, typical
	- 36Mbps PER @ -88 dBm, typical
	- 48Mbps PER @ -83 dBm, typical
	- 54Mbps PER @ -79 dBm, typical
SISO Receive Sensitivity (11n,20MHz) @10% PER	- MCS=0 PER @ -92 dBm, typical
	- MCS=1 PER @ -92 dBm, typical
	- MCS=2 PER @ -91 dBm, typical
	- MCS=3 PER @ -88 dBm, typical
	- MCS=4 PER @ -84 dBm, typical
	- MCS=5 PER @ -79 dBm, typical
	- MCS=6 PER @ -78 dBm, typical
	- MCS=7 PER @ -76 dBm, typical
MIMO Receive Sensitivity (11n,20MHz) @10% PER	- MCS=0 PER @ -92 dBm, typical
	- MCS=1 PER @ -92 dBm, typical
	- MCS=2 PER @ -92 dBm, typical
	- MCS=3 PER @ -91 dBm, typical

	- MCS=4	PER @ -87 dBm, typical
	- MCS=5	PER @ -82 dBm, typical
	- MCS=6	PER @ -81 dBm, typical
	- MCS=7	PER @ -79 dBm, typical
	- MCS=8	PER @ -92 dBm, typical
	- MCS=15	PER @ -76 dBm, typical
SISO Receive Sensitivity (11n,40MHz) @10% PER	- MCS=0	PER @ -92 dBm, typical
	- MCS=1	PER @ -90 dBm, typical
	- MCS=2	PER @ -88 dBm, typical
	- MCS=3	PER @ -85 dBm, typical
	- MCS=4	PER @ -81 dBm, typical
	- MCS=5	PER @ -77 dBm, typical
	- MCS=6	PER @ -75 dBm, typical
	- MCS=7	PER @ -74 dBm, typical
MIMO Receive Sensitivity (11n,40MHz) @10% PER	- MCS=0	PER @ -92 dBm, typical
	- MCS=1	PER @ -92 dBm, typical
	- MCS=2	PER @ -91 dBm, typical
	- MCS=3	PER @ -88 dBm, typical
	- MCS=4	PER @ -84 dBm, typical
	- MCS=5	PER @ -80 dBm, typical
	- MCS=6	PER @ -78 dBm, typical
	- MCS=7	PER @ -77 dBm, typical
	- MCS=8	PER @ -86 dBm, typical
	- MCS=15	PER @ -74 dBm, typical
SISO Receive Sensitivity (11ac,20MHz) @10% PER	- MCS=0, NSS1	PER @ -92 dBm, typical
	- MCS=1, NSS1	PER @ -92 dBm, typical
	- MCS=2, NSS1	PER @ -90 dBm, typical
	- MCS=3, NSS1	PER @ -87 dBm, typical
	- MCS=4, NSS1	PER @ -83 dBm, typical
	- MCS=5, NSS1	PER @ -78 dBm, typical
	- MCS=6, NSS1	PER @ -77 dBm, typical
	- MCS=7, NSS1	PER @ -76 dBm, typical
	- MCS=8, NSS1	PER @ -72 dBm, typical
MIMO Receive Sensitivity (11ac,20MHz) @10% PER	- MCS=0, NSS1	PER @ -92 dBm, typical
	- MCS=1, NSS1	PER @ -92 dBm, typical
	- MCS=2, NSS1	PER @ -92 dBm, typical
	- MCS=3, NSS1	PER @ -90 dBm, typical
	- MCS=4, NSS1	PER @ -86 dBm, typical

	- MCS=5, NSS1 PER @ -81 dBm, typical
	- MCS=6, NSS1 PER @ -80 dBm, typical
	- MCS=7, NSS1 PER @ -79 dBm, typical
	- MCS=8, NSS1 PER @ -75 dBm, typical
	- MCS=0, NSS2 PER @ -92 dBm, typical
	- MCS=8, NSS2 PER @ -71 dBm, typical
SISO Receive Sensitivity (11ac,40MHz) @10% PER	- MCS=0, NSS1 PER @ -92 dBm, typical
	- MCS=1, NSS1 PER @ -89 dBm, typical
	- MCS=2, NSS1 PER @ -88 dBm, typical
	- MCS=3, NSS1 PER @ -84 dBm, typical
	- MCS=4, NSS1 PER @ -81 dBm, typical
	- MCS=5, NSS1 PER @ -76 dBm, typical
	- MCS=6, NSS1 PER @ -75 dBm, typical
	- MCS=7, NSS1 PER @ -74 dBm, typical
	- MCS=8, NSS1 PER @ -69 dBm, typical
	- MCS=9, NSS1 PER @ -68 dBm, typical
MIMO Receive Sensitivity (11ac,40MHz) @10% PER	- MCS=0, NSS1 PER @ -92 dBm, typical
	- MCS=1, NSS1 PER @ -92 dBm, typical
	- MCS=2, NSS1 PER @ -90 dBm, typical
	- MCS=3, NSS1 PER @ -87 dBm, typical
	- MCS=4, NSS1 PER @ -84 dBm, typical
	- MCS=5, NSS1 PER @ -79 dBm, typical
	- MCS=6, NSS1 PER @ -78 dBm, typical
	- MCS=7, NSS1 PER @ -78 dBm, typical
	- MCS=8, NSS1 PER @ -72 dBm, typical
	- MCS=9, NSS1 PER @ -71 dBm, typical
SISO Receive Sensitivity (11ac,80MHz) @10% PER	- MCS=0, NSS2 PER @ -92 dBm, typical
	- MCS=9, NSS2 PER @ -68 dBm, typical
	- MCS=0, NSS1 PER @ -89 dBm, typical
	- MCS=1, NSS1 PER @ -86 dBm, typical
	- MCS=2, NSS1 PER @ -84 dBm, typical
	- MCS=3, NSS1 PER @ -80 dBm, typical
	- MCS=4, NSS1 PER @ -78 dBm, typical
	- MCS=5, NSS1 PER @ -74 dBm, typical
	- MCS=6, NSS1 PER @ -72 dBm, typical
	- MCS=7, NSS1 PER @ -70 dBm, typical
	- MCS=8, NSS1 PER @ -67 dBm, typical
	- MCS=9, NSS1 PER @ -65 dBm, typical

MIMO Receive Sensitivity (11ac,80MHz) @10% PER	- MCS=0, NSS1 PER @ -90 dBm, typical
	- MCS=1, NSS1 PER @ -89 dBm, typical
	- MCS=2, NSS1 PER @ -88 dBm, typical
	- MCS=3, NSS1 PER @ -83 dBm, typical
	- MCS=4, NSS1 PER @ -80 dBm, typical
	- MCS=5, NSS1 PER @ -78 dBm, typical
	- MCS=6, NSS1 PER @ -75 dBm, typical
	- MCS=7, NSS1 PER @ -73 dBm, typical
	- MCS=8, NSS1 PER @ -69 dBm, typical
	- MCS=9, NSS1 PER @ -68 dBm, typical
	- MCS=0, NSS2 PER @ -88 dBm, typical
	- MCS=9, NSS2 PER @ -65 dBm, typical
Maximum Input Level	802.11a/n : -30 dBm
Antenna Reference	Small antennas with 0~5 dBi peak gain

Absolute Max. Ratings:

Symbol	Min.	Max.	Unit
DC input	11.4	12.6	V
Ambient Temp.	0	+40	Celsius degrees
Latency	40	80	ms (*measured by ethernet transmission, the figures may vary due to different ethernet environment)