

Ranger Mk II System

	TRANSMITTER	RECEIVER
VIDEO		
Video Inputs	1x 12G-SDI SMPTE 2082-1 standard/75 Ω , 1x HDMI 2.0 Type-A receptacle	N/A
Video Outputs	1x 12G-SDI SMPTE 2082-1 standard / 75 Ω (BNC x 1)	2x 12G-SDI SMPTE 2082-1 standard/75 Ω 1x HDMI 2.0 Type-A receptacle
Color Sampling	SDI: YCbCr 4:2:2, 10-bit HDMI: RGB / YCbCr 4:4:4, 8-bit YCbCr 4:2:2 10-bit	SDI: YCbCr 4:2:2, 10-bit HDMI: RGB / YCbCr 4:4:4, 8-bit YCbCr 4:2:2 10-bit
Delay (TX to RX)	<0.001sec (without format conversions)	<0.001sec (without format conversions)
Supported Resolutions	4Kp23.98/24/25/29.97/30/50/59.94/60 1080p23.98/24/25/29.97/30/50/59.94/60 1080psf23.98/24/25/29.97/30 1080i50/59.94/60 720p50/59.94/60 480p59.94 576p50 (HDMI only)	4Kp23.98/24/25/29.97/30/50/59.94/60 1080p23.98/24/25/29.97/30/50/59.94/60 1080psf23.98/24/25/29.97/30 1080i50/59.94/60 720p50/59.94/60 480i 576i 480p59.94 576p50 (HDMI only)
Input Cross Conversion	Yes, HDMI to SDI	N/A
Output Video Scaling	N/A	Yes, Framerate and Resolution Scaling
VIDEO PROCESSING		
Video Compression	Uncompressed	Uncompressed
Test Pattern Generator	N/A	Yes
Video Format Conversion	Yes	Yes

Support

Spectrum Analyzer	Yes (via Ranger Manager App)	Yes
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AUDIO

Audio Compression	48kHz 24-bit PCM	48kHz 24-bit PCM
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Audio Input	Embedded SDI/HDMI Audio Input (2 channel)	N/A
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Audio Output	N/A	Embedded SDI/HDMI Audio Input (2 channel)
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PHYSICAL ATTRIBUTES

Dimensions	3.7" x 6.1" x 1.3" (95mm x 157mm x 34mm)	4.5" x 5.3" x 1.3" (114.5mm x 137mm x 34mm)
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Weight	22oz (624g)	20.6oz (584g)
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Construction	Milled aluminum (chassis), regulation-compliant PCB	
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INTERFACES

Configuration Interface	OLED Screen with Menu Joystick Navigation	OLED Screen with Menu Joystick Navigation
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Switches	On/Off Switch	On/Off Switch
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Desktop App	Ranger Manager application for OSX & Windows	Ranger Manager application for OSX & Windows
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Mobile App	Ranger Manager app (iOS and Android) configuration via Bluetooth	Ranger Manager app (iOS and Android) configuration via Bluetooth
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USB Interface	Upgrade via USB-C	Upgrade via USB-C
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Bluetooth	Bluetooth 5 LE	Bluetooth 5 LE
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NETWORK

Wireless	Licensed Frequencies*: 4.900 ~ 5.170 GHz	Licensed Frequencies*: 4.900 ~ 5.170 GHz
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5.350 ~ 5.470 GHz	5.350 ~ 5.470 GHz
5.850 ~ 5.925 GHz	5.850 ~ 5.925 GHz
Unlicensed Frequencies:	Unlicensed Frequencies:
5.170 ~ 5.250 GHz (Non-DFS)	5.170 ~ 5.250 GHz (Non-DFS)
5.250 ~ 5.350 GHz (DFS)	5.250 ~ 5.350 GHz (DFS)
5.470 ~ 5.725 GHz (DFS)	5.470 ~ 5.725 GHz (DFS)
5.725 ~ 5.850 GHz (Non-DFS)	5.725 ~ 5.850 GHz (Non-DFS)
5.925 ~ 6.425 GHz	5.925 ~ 6.425 GHz

**By using this product with licensed frequencies, you acknowledge and agree to comply with all applicable regulations and rules, and to only operate this system in compliance with the applicable license requirements.
Frequency ranges listed here include upper and lower limits, configuration is based on selected center frequencies.*

RF Channel Selection	Auto, Manual (Manual available for non-DFS, DFS, and Licensed Frequencies)	Auto, Manual (Manual available for non-DFS, DFS, and Licensed Frequencies)
Encryption	AES-256, RSA-1024 key exchange	AES-256, RSA-1024 key exchange
RF Power	23 dBm EIRP (max power)	21 dBm EIRP (max power)
Antennas	1x Horizontal N-Type 2dbi antenna 1x Vertical N-Type 2dbi antenna	5x Vertical 2dbi antennas
Range	Up to 5000ft [1524m] with Panel Antenna	Up to 5000ft [1524m] with Panel Antenna
Noise Rejection	Can coexist with Wi-Fi and 5GHz cordless phones, and operate up to 6 sets in the same location	Can coexist with Wi-Fi and 5GHz cordless phones, and operate up to 6 sets in the same location
POWER		
Power Input	2-Pin locking connector 7-28 VDC	2-Pin locking connector 6-28 VDC
Battery	Gold or V-mount battery plate	Gold or V-mount battery plate
Nominal Power Consumption	12 Watts	18 Watts
Operating Temperature	0~40 deg-C	0~40 deg-C

GENERAL

Mountability	Integrated Gold or V Battery Mount, and multiple mounting options with M3 and 1/4-20" holes	Integrated Gold or V Battery Mount, and multiple mounting options with 3/8"x16 and 1/4-20" holes
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