

# TERADEK Spark 4K

## Spark 4K: Zero-Delay 4K Wireless Transmission System

Spark 4K is Teradek's latest consumer-level wireless video system that is capable of transmitting untethered local 4K HDR video at a range of up to 500 feet line-of-sight over the unlicensed 5GHz band. Spark 4K can multicast to up to two Spark 4K receivers simultaneously, has portable power, internal antennas, and a compact design making it truly wireless.



	SPARK 4K - TX	SPARK 4K - RX
<b>VIDEO</b>		
Video Inputs	1x HDMI 1.4b Type-A receptacle	N/A
Video Outputs	N/A	1x HDMI 1.4b Type-A receptacle
Color Sampling	HDMI: RGB 4:2:2, 10-bit	HDMI: RGB 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 1080p23.98/24/25/29.97/30/50/59.94/60 1080i50/59.94/60 720p50/59.94/60 480p50 576p59.94/60	4Kp23.98/24/25/29.97/30 1080p23.98/24/25/29.97/30/50/59.94/60 1080i50/59.94/60 720p50/59.94/60 480p50 576p59.94/60
Output Video Scaling	N/A	No
<b>VIDEO PROCESSING</b>		
Video Compression	Visually lossless	Visually lossless
<b>AUDIO</b>		
Audio Compression	48kHz 24-bit PCM	48kHz 24-bit PCM
Audio Input	Embedded HDMI Audio Input (2 channel)	N/A
Audio Output	N/A	Embedded HDMI Audio Input (2 channel)
<b>PHYSICAL ATTRIBUTES</b>		
Dimensions	3.44" x 2.66" x 1.22" (87mm x 68mm x 31mm)	4.39" x 3.19" x 1" (112mm x 81mm x 25mm)
Weight	158g (5.6 oz)	187g (6.6 oz)
Construction	ABS Plastic	ABS Plastic

## SPARK 4K - TX

## SPARK 4K - RX

### INTERFACES

Status Display	OLED display - <ul style="list-style-type: none"><li>• Input video format</li><li>• Selected frequency</li><li>• Video Quality %</li><li>• Link status</li></ul>	OLED display - <ul style="list-style-type: none"><li>• Input video format</li><li>• Selected frequency</li><li>• Video Quality %</li><li>• Link status</li></ul>
Switches	On/Off Switch	On/Off Switch
Desktop App	Launchpad application for OSX & Windows	Launchpad application for OSX & Windows
Mobile App	Launchpad App	Launchpad App
USB Interface	Upgrade via Micro-USB	Upgrade via Micro-USB
Recessed Button	Enable/disable Bluetooth	Enable/disable Bluetooth

### WIRELESS

Wireless	<b>DFS Frequencies:</b> 5.270 ~ 5.670 GHz <b>Non-DFS Frequencies:</b> 5.190 ~ 5.230 GHz and 5.755 ~ 5.795 GHz	<b>DFS Frequencies:</b> 5.270 ~ 5.670 GHz <b>Non-DFS Frequencies:</b> 5.190 ~ 5.230 GHz and 5.755 ~ 5.795 GHz
Bluetooth	2.4 GHz	2.4 GHz
RF Channel Selection	Auto only, 40 MHz only, no blocked frequencies	Auto only, 40 MHz only, no blocked frequencies
Encryption	AES-128, RSA-1024 key exchange	AES-128, RSA-1024 key exchange
RF power	19 dbm EIRP (<80mW transmit power)	17 dbm EIRP (<51mW transmit power)
Antennas	2x Internal 2dBi antennas (AMC mode always on)	5x Internal 2dBi antennas
Range	Up to 500 ft line of sight	Up to 500 ft line of sight
Multicast	Can connect one transmitter to up to 2 receivers	Can connect one transmitter to up to 2 receivers
Noise Rejection	Can coexist with Wi-Fi and 5GHz cordless phones, and can operate up to 4 sets in same location	Can coexist with Wi-Fi and 5GHz cordless phones, and can operate up to 4 sets in same location
Compatibility	Spark 4K products only	Spark 4K products only

### POWER

Power Input	USB-C power input	USB-C and 7-18 DC power input
Battery	Internal 9.5Wh battery (1.5hr run time)	None
Nominal Power Consumption	5 Watts	6 Watts
Operating Temperature	0~40 deg-C	0~40 deg-C

### GENERAL

Mountability	Multiple mounting options with M3 and 1/4-20" holes	Multiple mounting options with M3 and 1/4-20" holes
--------------	---	---