

Mars M1 Enhanced

Wireless Monitoring & Transmission — One and Done

The Mars M1 Enhanced is a versatile wireless monitor that integrates transmitter, receiver, and monitoring functions into one solution. The 5.5" touch screen with ground-breaking advantages such as accurate color calibration and Rec. 709 color gamut, delivers a pleasant monitoring experience with professional image analysis functions. The device supports an impressive LOS range of up to 450ft (150m) and boasts a low latency of only 0.08 seconds, allowing for more flexibility in device deployment and ensuring seamless monitoring without noticeable lag.



TX, RX, and Monitor
— All in One



Revolutionary
Operating System



1,000 Nits of
Brightness



5.5" Touch LCD
Screen



450ft (150m)
LOS Range



0.08s Low
Latency



I Specifications

Device Mode	Transmitter mode		Receiver mode		
Video Input Interface	HDMI 1.4b IN (Type-A female) 3G-SDI IN (BNC female)		/		
Video Output Interface	HDMI 1.4b LOOPOUT (Type-A female)		HDMI 1.4b OUT (Type-A female)		
Antenna Interface	Two RP-SMA male interfaces		Two RP-SMA male interfaces		
Power Input Interface	DC IN (2.0mm core socket)		DC IN (2.0mm core socket)		
Power Output Interface	DC OUT (2.0mm core socket)		DC OUT (2.0mm core socket)		
Headphone Jack	3.5mm		3.5mm		
Upgrade Interface	USB-C (USB-2.0 OTG)		USB-C (USB-2.0 OTG)		
Screen Size (diagonal)	5.5" touchscreen		5.5" touchscreen		
Screen Resolution	1920x1080 pixels		1920x1080 pixels		
Pixel Density	403 PPI		403 PPI		
Aspect Ratio	16:09		16:09		
Screen Brightness	1,000 nits		1,000 nits		
Contrast Ratio	1000:1		1000:1		
Power Input Voltage	DC IN: 7–16V 2.5A (nominal 12V) NP-F battery: 6.8V–8.4V		DC IN: 7–16V 2.5A (nominal 12V) NP-F battery: 6.8V–8.4V		
DC Output Voltage	8.4V±5%		8.4V±5%		
Power Consumption	<16W		<13.6W		
Net Weight	Approx. 400g (14.1oz) with external antennas excluded		Approx. 400g (14.1oz) with external antennas excluded		
Dimensions	(L x W x H): 152mm x 96mm x 40mm (5.98" x 3.78" x 1.57") with external antennas excluded		(L x W x H): 152mm x 96mm x 40mm (5.98" x 3.78" x 1.57") with external antennas excluded		
Input Video Resolutio	HDMI IN: 720p50/59.94/60 Hz 1080i50/59.94/60 Hz 1080p23.98/24/25/29.97/30/50/59.94/60 Hz 3840x2160p23.98/24/25/29.97/30 Hz 4096x2160p23.98/24/25/29.97/30 Hz	SDI IN: 720p50/59.94/60 Hz 1080i50/59.94/60 Hz 1080p23.98/24/25/29.97/30 1080p50/59.94/60 Hz (3G-SDI level A) 1080p50/59.94/60 Hz (3G-SDI level B)	/		
	HDMI LOOPOUT (HDMI IN): 720p50/59.94/60 Hz 1080i50/59.94/60 Hz 1080p23.98/24/25/29.97/30/50/59.94/60 Hz 3840x2160p23.98/24/25/29.97/30 Hz 4096x2160p23.98/24/25/29.97/30 Hz	HDMI LOOPOUT (SDI IN): 720p50/59.94/60 Hz 1080i50/59.94/60 Hz 1080p23.98/24/25/29.97/30/50 /59.94/60 Hz	HDMI OUT: 720p50/59.94/60 Hz 1080i50/59.94/60 Hz 1080p23.98/24/25/29.97/30/50/59.94/60 Hz 1080p50/59.94/60 Hz	HDMI OUT: 720p50/59.94/60 Hz 1080i50/59.94/60 Hz 1080p23.98/24/25/29.97/30/50 /59.94/60 Hz	
	Note: When the device (in receiver mode) is connected to the Mars 4K transmitter, if the HDMI input video resolution of the Mars 4K transmitter is 3840x2160p24/25/30 Hz, the HDMI output video resolution of the device is 1920x1080p24/25/30 Hz.				
	Display Latency	<0.05s (test data when 1080p60 signals are transmitted in a laboratory environment. The display latency varies by video resolution.)		/	
	Operating Frequency	5.150–5.250GHz 5.250–5.350GHz		5.470–5.725GHz 5.725–5.850GHz	
Codec Technology	H.264				
Bit Rate	12Mbps				
Tx Power	≤ 21+/- 1.5dBm				
Transmission Latency	Approx. 0.08s (test data when 1080p60 signals are transmitted in a laboratory environment)				
LOS Range	Up to 450ft (150m) (test data in an unobstructed outdoor environment free of interference)				
Bandwidth	20MHz				
Audio Format	Eight audio channels for the HDMI 1.4b				
Operating Temperature	–10°C to 60°C (14° F to 140° F)				
Storage Temperature	–40°C to 60°C (–40° F to 140° F)				

Note: The operating frequency and TX power vary by country and region. In some countries and regions, the 5.1GHz, 5.2GHz, and 5.8GHz frequency bands are prohibited, or the 5.1GHz and 5.2GHz frequency bands are only allowed for indoor use. Please refer to local laws and regulations for more information.