

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)	/
Output Video Resolution	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 1080p50/59.94/60 Hz
Display Latency	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.		
Operating Frequency	<0.05s (test data when 1080p60 signals are transmitted in a laboratory environment. The display latency varies by video resolution.)		
Codec Technology	5.150-5.250GHz 5.470-5.725GHz 5.250-5.350GHz 5.725-5.850GHz		
Bit Rate	H.264		
Tx Power	12Mbps		
Transmission Latency	≤ 21 +/- 1.5dBm		
LOS Range	Approx. 0.08s (test data when 1080p60 signals are transmitted in a laboratory environment)		
Bandwidth	Up to 450ft (150m) (test data in an unobstructed outdoor environment free of interference)		
Audio Format	20MHz		
Operating Temperature	Eight audio channels for the HDMI 1.4b		
Storage Temperature	-10°C to 60°C (14° F to 140° F)		
	-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.