



MD62

4K60 MEDICAL WIRELESS VIDEO LINK SYSTEM

MD62 Wireless Video transmitter and receiver devices enable the connection of live video to secondary monitors, eliminating the need for cables, and expanding mobility and flexibility during surgical procedures. The MD62 delivers 4K60 video, in high fidelity, over a reliable, secure, and robust link, while keeping zero latency (~1msec), ideal for Endoscopy Systems, Clinical Microscopes, Robotic Surgery, and other medical video application. A single transmitter is capable of simultaneously sending the same video to four separate receiver destinations. Quick and easy installation saves time and costs by maximizing OR availability.

Part Number

MD62 Transmitter: MDWL2_B1J1TX

MD62 Receiver: MDWL2_B1J1RX

	TRANSMITTER	RECEIVER
VIDEO		
Video Inputs	1x 12G-SDI SMPTE 2082-1 standard/75 Ω 1x HDMI 2.0 Type-A	N/A
Video Outputs	1x Loopout 12G-SDI SMPTE 2082-1 standard/75 Ω	2x 12G-SDI SMPTE 2082-1 standard/75 Ω 1x HDMI 2.0 Type-A
Color Sampling	SDI: YCbCr 4:2:2 10-Bit, HDMI: RGB/YCbCr; 4:4:4/4:2:2	SDI: YCbCr 4:2:2 10-Bit, HDMI: RGB/YCbCr; 4:4:4/4:2:2
Delay (TX to RX)	~1msec	~1msec
Supported Resolutions	2D: 4Kp23.98/24/25/29.97/30/50/59.94/60 1080p23.98/24/25/29.97/30/50/59.94/60 1080i50/59.94/60 720p50/59.94/60 3D (Side by Side/Top bottom/ Line-by-Line) 4Kp23.98/24/25/29.97/30/50/59.94/60 1080p23.98/24/25/29.97/30/50/59.94/60	2D: 4Kp23.98/24/25/29.97/30/50/59.94/60 1080p23.98/24/25/29.97/30/50/59.94/60 1080i50/59.94/60 720p50/59.94/60 3D (Side by Side/Top bottom/ Line-by-Line) 4Kp23.98/24/25/29.97/30/50/59.94/60 1080p23.98/24/25/29.97/30/50/59.94/60

	TRANSMITTER	RECEIVER
AUDIO		
Audio Compression	48KHz 24-bit PCM	48KHz 24-bit PCM
Audio Input	Embedded SDI/HDMI Audio Input (2 channel)	N/A
Audio Output	Embedded SDI Audio output (2 channel)	Embedded SDI/HDMI Audio Output (2 channel)
PHYSICAL ATTRIBUTES		
Dimensions	5.9"L x 3.6"W x 1.1"H (149 x 91.2 x 27.1mm)	5.1"L x 5.5"W x 1.1"H (129 x 138.8 x 27.1mm)
Weight	12.7oz (360g)	15.3oz (434g)
Device Composite	Milled aluminum (chassis) and regulation-compliant PCB	Milled aluminum (chassis) and regulation-compliant PCB
Mountability	Compatible with the VESA mounting kits AMN_VESA_KIT01 and AMN_VESA_KIT02	Compatible with the VESA mounting kits AMN_VESA_KIT01 and AMN_VESA_KIT02
INTERFACES		
Configuration Interface	OLED Screen with Menu Joystick Navigation	OLED Screen with Menu Joystick Navigation
Switches	On/Off Switch	On/Off Switch
USB	API/ Upgrade via Micro-USB	API/ Upgrade via Micro-USB
WIRELESS VIDEO NETWORK		
Wireless Video Bands	DFS Frequencies: 5.250 ~ 5.350 GHz and 5.470 ~ 5.725 GHz Non-DFS Frequencies: 5.150 ~ 5.250 GHz and 5.725 ~ 5.850 GHz NOTE: Frequencies and channels are dependent on regional approvals.	DFS Frequencies: 5.250 ~ 5.350 GHz and 5.470 ~ 5.725 GHz Non-DFS Frequencies: 5.150 ~ 5.250 GHz and 5.725 ~ 5.850 GHz
Bandwidth	20MHz/40MHz	20MHz/40MHz
Modulations	OFDM	OFDM
RF Power	18dBm EIRP	14dBm EIRP
Antennas	4x Internal 2dBi antennas	5x Internal 2dBi antennas
Encryption	AES-256, RSA-1024 key exchange	AES-256, RSA-1024 key exchange
Range	Up to 100 ft (30m)	Up to 100 ft (30m)
Multicast	Transmitter can stream simultaneously to up to 4 receivers	Receiver can switch between 4 transmitters
Noise Rejection	Can coexist with WiFi and other devices working on the 5GHz band. Up to 6 sets in the same location	Can coexist with WiFi and other devices working on the 5GHz band. Up to 6 sets in the same location

TRANSMITTER		RECEIVER
BLUETOOTH AND NFC		
BT Band	2402 - 2480MHz	2402 - 2480MHz
Bandwidth	1MHz	1MHz
BT RF Power	7dBm EIRP	7dBm EIRP
NFC	13.56MHz	13.56MHz
NFC Antenna Inductance	2.1uH	2.1uH
POWER		
Power Input	2.1mm barrel connector 12V DC	2.1mm barrel connector 12V DC
Nominal Power Consumption	20 Watts	18 Watts
Operating Temperature	0-40C (32-104F), Relative humidity range: 25-75%	
CERTIFICATION AND APPROVALS		
General	ISO 13485:2016	
	MDR 2017/745 Class I	
	FDA Manufacturer Registration 3014730563 FDA Listing Class I, 510K exempt.	
	CFR 21 Parts 801, 807, 820, 880	
	UK MDR 2002	
Medical Electrical Equipment	IEC 60601-1:2005 + A1:2012 + A2:2020, EN 60601-1:2006 + A1:2013 + A2:2021, ANSI/AAMI ES60601-1:2005+ A1:2012 + A2:2021, CAN/CSA-C22.2 No. 60601-1:14 + A2:2022	
IEC 60601-1-6:2010+A2:2021, EN 60601-1:2010 + A1:2015 + A2:2021	IEC 60601-1:2005 + A1:2012 + A2:2020, EN 60601-1:2006 + A1:2013 + A2:2021, ANSI/AAMI ES60601-1:2005+ A1:2012 + A2:2021, CAN/CSA-C22.2 No. 60601-1:14 + A2:2022 IEC 60601-1-6:2010+A2:2021, EN 60601-1:2010 + A1:2015 + A2:2021 IEC 60601-1-2:2014 + A1:2020, EN 60601-1-2:2015 + A1(21) Edition 4.1, CISPR 11:2015 + A1(16) + A2(19) group 1 class B limits	
Materials	Regulation (EC) No 1907/2006, Directive 2011/65/EU & 2015/863/EU	
Radio	FCC CFR 47 Part 15, Radio FCC CFR 47 Part 2 RE-Directive 2014/53/EU: EN 301 893 V2.1.1, EN 300 328 V2.2.2, EN 50665:2018 Electromagnetic Compatibility - EN 301 489-1 V2.2.3, EN 301 489-17 V3.2.4, Class B	