

Falco MD11: Medical Wireless 4K 30Hz Video System

Falco MD11 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 MD11 delivers 4K 30Hz video in high fidelity over a reliable, secure, and robust link, while keeping the latency below 1mSec. This solution is ideal for C-arms, Surgical Cameras, Endoscopy Systems, Robotic Surgery, and other medical video applications. A single transmitter is capable of simultaneously sending the same video to four separate receiver destinations. Quick and easy installation saves time and costs, and maximizes OR availability.



	TRANSMITTER	RECEIVER
VIDEO		
Video Inputs	1x HDMI 1.4 Type-A	N/A
Video Outputs	1x HDMI 1.4 Type-A	1x HDMI 1.4 Type-A
Color Sampling	RGB: 8/10-bit YCbCr: 4:4:4; 8/10-bit YCbCr: 4:4:2	RGB: 8/10-bit YCbCr: 4:4:4; 8/10-bit YCbCr: 4:4:2
Delay	<0.001sec	<0.001sec
Supported Resolutions	*4Kp30/29.97/25/24/23.98 1080p60/59.94/50/30/29.97/25/24/23.98 1080i60/59.94/50 720p60/59.94/50	*4Kp30/29.97/25/24/23.98 1080p60/59.94/50/30/29.97/25/24/23.98 1080i60/59.94/50 720p60/59.94/50
NOTE: Resolutions higher than 1080p60Hz are supported in 40MHz bandwidth only.		
AUDIO		
Audio Format	48kHz 24-bit PCM	48kHz 24-bit PCM
Audio Input	Embedded HDMI Audio Input (2 channel)	N/A
Audio Output	Embedded HDMI Audio in Loopback (2 channels)	Embedded HDMI Audio Output (2 channels)
PHYSICAL ATTRIBUTES		
Dimensions	6" x 3.1" x 1" (151.4 x 79 x 25mm)	6" x 3.1" x 1" (151.4 x 79 x 25mm)
Weight	10.4oz (296g)	11.2oz (317g)
Construction	Milled aluminum (chassis), regulation-compliant PCB	Milled aluminum (chassis), regulation-compliant PCB
INTERFACES		
Navigation Button	Control and configuration	Control and configuration
OLED	Status and Configuration Display	Status and Configuration Display
BLE and NFC	Control and configuration	Control and configuration
Switches	On/Off Switch	On/Off Switch
USB Interface	Update via USB-C	Update via USB-C
Device Control	RS-232 (for future use)	RS-232 (for future use)

TRANSMITTER

RECEIVER

WIRELESS VIDEO NETWORK

Wireless Video Bands	DFS Frequencies: 5.250 ~ 5.350 GHz, 5.470 ~ 5.725 GHz Non-DFS Frequencies: 5.150 ~ 5.250 GHz, 5.725 ~ 5.850 GHz	DFS Frequencies: 5.250 ~ 5.350 GHz, 5.470 ~ 5.725 GHz Non-DFS Frequencies: 5.150 ~ 5.250 GHz, 5.725 ~ 5.850 GHz
Encryption	AES-256, RSA-1024 key exchange	AES-256, RSA-1024 key exchange
Bandwidth	20MHz/40MHz	20MHz/40MHz
Modulations	OFDM	OFDM
RF Power	15dBm EIRP	14dBm EIRP
Antennas	2x Internal 0dBi antennas	5x Internal 2dBi antennas
Range	Up to 100ft (30m)	Up to 100ft (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 at the same location	Can coexist with WiFi and other devices working on the 5GHz band. Up to 6 sets at the same location

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 12 VDC	2.1mm barrel connector 12 VDC
Nominal Power Consumption	6 Watts	7 Watts
Operating Temperature	0-40°C (32-104°F), Relative humidity range: 25-75%	0-40°C (32-104°F), Relative humidity range: 25-75%

GENERAL

Mountability	Can be mounted on a VESA Plate and be placed in any position.	Can be mounted on a VESA Plate and be placed in any position.
RF Compliance	FCC, EU, ISED, KC, MIC	FCC, EU, ISED, KC, MIC

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 60601-1-2:2014 + 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