

# TERADEK Falco MD62

## Falco MD62: 4K60 Medical Wireless Video Link Modules

Falco 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 the latency below 2mSec, 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.



|                            | TRANSMITTER  | RECEIVER   |
|----------------------------|--|--|
| <b>VIDEO</b>               |  |  |
| Video Inputs               | 1x 12G-SDI SMPTE 2082-1 standard/75 Ω<br>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<br>1x HDMI 2.0 Type-A  |
| Color Sampling             | <b>SDI:</b> YCbCr 4:2:2 10-Bit, <b>HDMI:</b> RGB/YCbCr; 4:4:4/4:2:2  | <b>SDI:</b> YCbCr 4:2:2 10-Bit, <b>HDMI:</b> RGB/YCbCr; 4:4:4/4:2:2  |
| Delay (TX to RX)           | <0.002sec  | <0.002sec  |
| Supported Resolutions      | <b>2D:</b> 4Kp23.98/24/25/29.97/30/50/59.94/60<br>1080p23.98/24/25/29.97/30/50/59.94/60<br>1080i50/59.94/60<br>720p50/59.94/60<br><b>3D (Side by Side/Top bottom):</b><br>4Kp23.98/24/25/29.97/30/50/59.94/60<br>1080p23.98/24/25/29.97/30/50/59.94/60 | <b>2D:</b> 4Kp23.98/24/25/29.97/30/50/59.94/60<br>1080p23.98/24/25/29.97/30/50/59.94/60<br>1080i50/59.94/60<br>720p50/59.94/60<br><b>3D (Side by Side/Top bottom):</b><br>4Kp23.98/24/25/29.97/30/50/59.94/60<br>1080p23.98/24/25/29.97/30/50/59.94/60 |
| <b>AUDIO</b>               |  |  |
| 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)   |
| <b>PHYSICAL ATTRIBUTES</b> |  |  |
| 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 <b>AMN_VESA_KIT01</b> and <b>AMN_VESA_KIT02</b>   | Compatible with the VESA mounting kits <b>AMN_VESA_KIT01</b> and <b>AMN_VESA_KIT02</b>   |
| <b>INTERFACES</b>          |  |  |
| Configuration Interface    | OLED Screen with Menu Joystick Navigation  | OLED Screen with Menu Joystick Navigation  |
| Switches                   | On/Off Switch  | On/Off Switch  |
| USB                        | Upgrade via Micro-USB  | Upgrade via Micro-USB  |

## TRANSMITTER

## RECEIVER

### WIRELESS VIDEO NETWORK

|                      |  |  |
|----------------------|--|--|
| Wireless Video Bands | <b>DFS Frequencies:</b><br>5.250 ~ 5.350 GHz and 5.470 ~ 5.725 GHz<br><b>Non-DFS Frequencies:</b><br>5.150 ~ 5.250 GHz and 5.725 ~ 5.850 GHz<br><br><b>NOTE: Frequencies and channels are dependent on regional approvals.</b> | <b>DFS Frequencies:</b><br>5.250 ~ 5.350 GHz and 5.470 ~ 5.725 GHz<br><b>Non-DFS Frequencies:</b><br>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             | <b>4x</b> Internal 2dBi antennas   | <b>5x</b> 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  |

### 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 - 40°C                      | 0 - 40°C                      |

### GENERAL

|               |                        |
|---------------|------------------------|
| RF Compliance | FCC, EU, ISED, KC, MIC |
|---------------|------------------------|

### CERTIFICATION AND APPROVALS

|                              |   |
|------------------------------|---|
| General                      | ISO 13485:2016<br>MDR 2017/745 Class I<br>FDA Manufacturer Registration 3014730563<br>FDA Listing Class I, 510K exempt.<br>CFR 21 Parts 801, 807, 820, 880<br>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<br>IEC 60601-1-6:2010+A2:2021, EN 60601-1:2010 + A1:2015 + A2:2021<br>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,<br>Directive 2011/65/EU & 2015/863/EU   |
| Radio                        | FCC CFR 47 Part 15, Radio FCC CFR 47 Part 2<br>RE-Directive 2014/53/EU: EN 301 893 V2.1.1, EN 300 328 V2.2.2, EN 50665:2018<br>Electromagnetic Compatibility - EN 301 489-1 V2.2.3, EN 301 489-17 V3.2.4, Class B   |