# LU610

# LIVEU'S PROFESSIONAL HYBRID HEVC SOLUTION FOR VEHICLES AND FIXED LOCATIONS

The LU610 is LiveU's professional 1U HEVC rackmount encoder for vehicles and fixed locations, combining unparalleled video performance with extreme bandwidth efficiency.

The powerful encoder, based on LiveU's award-winning LU600 4K HEVC technology, offers the perfect hybrid solution for SNG trucks, point-to-point and point-to-multipoint application.

The LU610 offers superior HEVC video streaming quality (up to 20Mbps) using cellular, satellite, wired internet or hybrid connections. It includes four product versions:

- UHD/4K (up to 4Kp60)
- UHD/4K (up to 4Kp60) with six internal cellular modems
- Full HD (up to 1080p60)
- Full HD (up to 1080p60) with six internal cellular modems

The unit can be used in SNG trucks, connected to the LiveU Xtender active antenna and KA-SAT equipment for the ultimate hybrid solution, providing guaranteed bandwidth in remote areas. Alternately, it can also be used in fixed location, replacing expensive fiber and satellite applications.

Equipped with an intuitive front panel display and control, the unit supports multiple operational modes including Live & Store, DataBridge for high-speed Internet connectivity and Video Return for real-time live feeds from the studio.

The LU610 incorporates LiveU's unique Reliable Transport protocol (LRT™), delivering optimized video performance over the most unreliable networks. The encoder is fully integrated with the LiveU Central cloud-based management platform for full control and monitoring via any browser supported device, making management of any size deployment faster and easier.

# LU610 ENCODER

## Technical Specifications

| | LU610-HD | LU610-4K |
|---|---|---|
| VIDEO RESOLUTIONS | 1080p50/60/25/30/24, 1080i50/60, 720p50/60/25/30,PAL, NTSC | 4Kp50/60/25/30/24, 1080p50/60/25/30/24, 1080i50/60, 720p50/60/25/30, PAL, NTSC |
| VIDEO INTERFACES | 3G/HD/SD-SDI, HDMI 1.4 | 12G/3G/HD/SD-SDI* |
| VIDEO ENCODER | H.265/HEVC, H.264 | H.265/HEVC, H.264 |
| AUDIO ENCODER | AAC-HE/LC – up to 4 audio channels | AAC-HE/LC – up to 8 audio channels |

*Supporting all formats of 4x3G-SDI – 2SI (2 sample interleave) or SD (square division), level A or level B.

## Technical Specifications

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|---|---|
| HW CONFIGURATION | Single encoder in a 1U standard rackmount configuration |
| SIMULTANEOUS BONDING | 2x Ethernet ports for connection to LAN and satellite (BGAN/KA/KU over IP),<br>Wi-Fi, 2x USB for connection to 3G/4G cellular modems,<br>6 internal cellular modems (for the modem version)<br>6 external cellular network connections (when used with LiveU Xtender) |
| OPERATIONAL MODES | Live: Low latency or maximum quality modes<br>Live and Store: Live streaming with local high-quality recording on unit<br>Store and Forward: Three quality-levels (for optimal quality vs speed)<br>FTP: Bonded file transfer<br>DataBridge: High-speed mobile broadband connectivity from the unit<br>Video Return: Sub-second video return over an external HDMI |
| MULTI-DESTINATION OUTPUT | Diverse A/V output destination: simultaneous stream to SDI and CDNs on the server side |
| AUTO POWER UP | Power-on feature suitable for automatic vehicle operation (power on with vehicle) |
| UNIT CONTROL | Local: full monitoring and control using unit's local interface<br>Remote: full control through LiveU Central management system |
| RESILIENCY AND QUALITY | Includes LiveU Reliable Transport (LRT™), featuring proprietary algorithms such as automatic Adaptive Bit Rate (ABR), automatic Forward Error Correction (FEC) and other packet loss recovery mechanisms |
| NETWORK INTERFACES | 2 RJ-45 Ethernet ports and 2.4/5GHz Wi-Fi (802.11 a/b/g/n/ac) |
| OTHER INTERFACES | 2x USB 2.0, 3.5mm audio jack, mini-XLR audio out, Full size SD card slot,<br>2x RP-SMA Wi-Fi, Full size HDMI out |
| DIMENSIONS | Industry-standard 1U rackmount server:<br>44 H x 436 W x 280 D (mm) / 1.73" H x 17.17" W x 11.02" D (in) |
| WEIGHT | 5Kg (176oz) |
| VIBRATION | MIL-STD-810G method 514.6 | Category 4 |
| TEMPERATURE | Operating: -5C to +45C (23F to 113F) |
| POWER | Dual power support:  AC: 100V to 240V | DC: 12V to 19V<br>Power consumption <30W |

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