

# DMNG PRO 180-RA

DIGITAL MOBILE NEWS GATHERING

## THE WORLD'S MOST ADVANCED POCKET-SIZED 3G/4G VIDEO UPLINK SYSTEM

Designed for newsgathering professionals, the AVIWEST DMNG PRO180-RA is ultra-compact, robust and highly-portable, and allows for direct camera-mounting using standard V-Mount, Gold Mount or PAGLOK plates. Its power and versatility give you the required flexibility to be always "news-ready" by combining any of the following network interfaces:

- 8 embedded 3G/4G modems with a high-efficiency custom antenna array giving faster network acquisition and improved resilience
- 8 MCX antenna connectors into which 2 AVIWEST QUAD cellular wideband antenna arrays can be plugged to strengthen the signal transmission in critical environment
- 1 built-in Wi-Fi modem with antenna
- 2 auxiliary USB ports
- Dual Gigabit Ethernet for streaming over LAN, BGAN, Thuraya or KA band

The DMNG PRO180-RA has been designed with ease-of-use in mind, the user-friendly intuitive interface allows broadcasting live videos in 2 simple clicks either from the embedded touchscreen or from a smartphone.



### MAIN FUNCTIONS

#### LIVE & AUTO-RECORD

Send a live broadcast-quality video over bonded IP networks: Ethernet, Wi-Fi, 3G/4G, and satellite networks, such as BGAN, THURAYA and KA band. The Auto-record function allows recording a high quality video file while streaming live at lower resolution and bitrate.

#### STORE & FORWARD

Record a high quality video file on the SD card. Forward any type of file from a mass-storage device (SD card or USB key) to the DMNG Studio.

#### PROGRESSIVE STORE & FORWARD

Record a high quality video file and forward it progressively to the remote receiver while recording.

## DMNG PRO180-RA SYSTEM OVERVIEW



## USE CASES

### LIVE OVER WIRELESS NETWORKS

The DMNG PRO180-RA has 8 internal 3G or 4G modems with high gain custom antennas, an internal Wi-Fi modem, plus 2 USB ports into which 2 additional 3G/4G USB modems can be plugged to stream a live video over bonded wireless networks.

Two AVIWEST QUAD wideband external cellular antenna arrays can be plugged into the 8 MCX antenna connectors on the unit front panel to strengthen the signal transmission in critical environment such as live from crowded areas (street demonstrations, sport stadiums, etc.) or from vehicles on the move.

### LIVE OVER ETHERNET

The DMNG PRO180-RA can stream a live video over bonded IP networks to a DMNG Studio or to any kind of H.264 receiver from professional IRDs (Integrated Receiver and Decoder) to VLC player.

### LIVE OVER SATELLITE

The DMNG PRO180-RA is compatible with the major portable satellite uplink solutions such as Inmarsat BGAN, Thuraya or KA band. It can also feed any kind of satellite modulator thanks to its MPEG-2 TS ASI output.

### LIVE TO ANY CDN

The DMNG system supports the needed protocols to stream a live high definition video directly to the Web or through any CDN (Content Delivery Network) or video streaming service platform.

## DMNG PRO180-RA MAIN SPECIFICATIONS

<b>MAIN FUNCTIONS</b>	<ul style="list-style-type: none"> <li>• Live &amp; Auto-record</li> <li>• Store &amp; Forward</li> <li>• Progressive Store and Forward</li> </ul>	<b>VIDEO COMPRESSION</b>	<ul style="list-style-type: none"> <li>• H.264/AVC Main/High Profile level 4</li> <li>• 1080i/720p/576i/480i @ 60/50/59.94/25/29.97 fps</li> <li>• Bitrates: 100 Kbps to 15 Mbps</li> <li>• CBR / Capped VBR / VBR</li> <li>• Simultaneous Live &amp; Auto-record at different bitrates</li> </ul>
<b>OTHER FUNCTIONS</b>	<ul style="list-style-type: none"> <li>• IFB return channel</li> <li>• Tally Light</li> <li>• Geolocation</li> </ul>	<b>AUDIO COMPRESSION</b>	<ul style="list-style-type: none"> <li>• AAC-LC/HE-AAC v2; 32 to 256 Kbps</li> <li>• MPEG-1 Layer II; 32 to 384 Kbps</li> <li>• Dual mono / Stereo</li> </ul>
<b>VIDEO INPUTS</b>	<ul style="list-style-type: none"> <li>• HD/SD-SDI embedded audio (BNC)</li> <li>• Composite video (BNC)</li> <li>• Analog Audio L&amp;R (BNC)</li> <li>• HDMI (1.3)</li> </ul>	<b>ADVANCED FEATURES</b>	<ul style="list-style-type: none"> <li>• Dual Encoding (Live &amp; Auto-record)</li> <li>• HD &amp; SD downscaling</li> <li>• Forward Error Correction (FEC)</li> <li>• AES Encryption (128-bit or 256-bit)</li> </ul>
<b>NETWORK INTERFACES</b>	<ul style="list-style-type: none"> <li>• 8 x 3G/4G-LTE build-in modems with 8 high efficiency custom antennas</li> <li>• 8 x MCX connectors for 2 AVIWEST QUAD Antennas</li> <li>• 1 built-in Wi-Fi modem with high efficiency custom antenna (client and access point modes)</li> <li>• 2 external USB 2.0 ports</li> <li>• Dual Gigabit Ethernet interfaces (LAN, WAN, BGAN, Thuraya &amp; KA Band Satellite)</li> </ul>	<b>OPERATIONAL MODES</b>	<ul style="list-style-type: none"> <li>• Automatic and dynamic video resolution</li> <li>• Glass-to-glass latency: down to 1 sec</li> <li>• Preset profiles &amp; manual modes</li> </ul>
<b>OTHER INTERFACES</b>	<ul style="list-style-type: none"> <li>• ASI-TS out (BNC)</li> <li>• USB 2.0 (Store, USB modems,...)</li> <li>• SD card slot</li> <li>• Stereo mini jack (3.5mm) in &amp; out (IFB)</li> <li>• Expansion port (RS232, RS485)</li> </ul>	<b>MONITORING &amp; CONFIGURATION</b>	<ul style="list-style-type: none"> <li>• Rotating touchscreen</li> <li>• On screen video preview</li> <li>• Remote configuration from Web GUI (any devices)</li> <li>• Remote control from receiver (DMNG Studio)</li> <li>• Remote control from manager (DMNG Manager)</li> </ul>
<b>NETWORKING PROTOCOLS</b>	<ul style="list-style-type: none"> <li>• RTP Unicast streaming</li> <li>• RTP Multicast streaming (IGMP)</li> <li>• MPEG-2 Transport Stream over UDP/IP</li> <li>• RTMP, RTSP, HLS (DMNG Studio)</li> </ul>	<b>POWER SUPPLY</b>	<ul style="list-style-type: none"> <li>• 12-24V input XLR 4 pins - Hot swap</li> <li>• Average power consumption: 30W</li> <li>• V-Mount or Gold Mount or PAGLOK plates</li> </ul>
		<b>PHYSICAL</b>	<ul style="list-style-type: none"> <li>• Dimensions: 245 x 128 x 55 mm</li> <li>• Weight (Kg/Lb): 1.16 / 2.55</li> <li>• Operating temperatures: -10°C to +50°C</li> </ul>