



# TVU One® (TM1000)

## Next Generation, Single-Channel Transmission

Advanced next-gen connectivity with  
**6x5G modems** with **MIMO Uplink** support

Single Channel **3G-SDI input** and **ISX**  
**transmission** with **ultra-low latency**

## Advantages

- △ Reliably transmits high picture quality video even in congested or challenging environments
- △ Uses patented ISX transmission protocol
- △ As low as 0.3 seconds glass-to-glass latency on cellular only
- △ HEVC/H.265 video compression
- △ Supports up to six 5G NR embedded modems with MIMO uplink
- △ CNCed from high-density aluminum



## TVU One® Technical Specifications\*

**Video Input**

3G-SDI and HDMI 2.0 video inputs

**Audio Input**

Upto 8 channel embedded SDI/HDMI audio

**Supported Data Connections**

Simultaneously aggregate up to 12 data connections including internal/external cellular, WiFi, Ethernet, IP Microwave or Satellite (Ka/Ku/BGAN/Starlink). System includes up to 6 embedded 5G NR/LTE/3G modems. Embedded 2.4/5GHz WiFi, Ethernet, etc.

**Internal Antennas**

Custom MIMO Cellular Uplink/Dowlink, MIMO WIFI/Hotpot

**Modem Support**

6 embedded 5G/NR (SA/NSA) 3GPP Release 16 modems

**Hotspot**

Dedicated HotSpot WiFi with MIMO antennas

**Power Source**

A single removable, rechargeable internal battery with an optional external Gold or V-Mount battery

**Transmitter Controls**

One button power-on, onboard monitoring and management, remote monitoring and management using mobile smart device or Command Center web service

**Power Consumption**

Max 34W

**Storage**

Up to 18 hours with 128GB SD card

**Video Input Resolution**

SDI Input

HD 1080p 25/29.97/30/50/59.94/60, 1080i 50/59.94/60, 720p 50/59.94/60

SD PAL 625i/50

SD NTSC 525i/59.94

HDMI Input

HD 1080p 25/29.97/30/50/59.94/60, 1080i 50/59.94/60, 720p 50/59.94/60

SD PAL 625i/50

SD NTSC 525i/59.94

**Encoding and Compression Standard**

H.265/HEVC or H.264

**Variable Bit-Rate Encoding**

TVU Smart VBR encoder

**Bit-Rate**

100K-70Mbps

**Return Video Feed**

HDMI output or HotSpot stream output  
Monitor TVU One transmission confidence monitor or SDI input at Transceiver

**Recording**

Supported, Dual Encoder

**Glass-to-Glass Latency**

As low as 0.3 seconds (cellular only)

**Battery Run Times**

Internal - 3 hours

External (PowerPac) - 3 hours

**SD Card Slot (up to 256G)**

1 card slot

**Operating Temperatures**

0°C to 40°C (32°F to 104°F)

**Unit Dimensions & Weight**

8.07 x 4.76 x 3in (205 x 121 x 76.5mm)

3lbs(1.35kg without internal battery)

4.3lbs(1.95kg with internal battery)

**Voice Communication**

IFB, Bidirectional VoIP, Partyline support

**Color Space & Bit-depth**

support 8bit 4:2:0 and 4:2:2

support 10bit 4:2:0

**Patented Transmission Algorithm**

Inverse Statmux X

**Start-Up Time**

Less than 30 seconds

**External Interface Connections**

SDI, HDMI, USB, Ethernet, IFB

**Store and Forward Supported****DC Input**

Right angle Mini Jack DC input that connects to external battery or supplied AC adapter. External power adapter: 11-19V DC

**Control Screen Specifications**

3.5 inch, 16:10 LCD touchscreen

**FCC and CE Compliant****Anatel Certified**

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