



HDT-1000

Digital Transmitter

Vislink's **V-Net Solution** collects, manages, and distributes mission critical actionable intelligence for crisis response. This end-to-end solution transmits video, voice, and data from the field to the decision makers who need it most.

As part of the V-Net Solution, the HDT-1000 digital transmitter meets the unique needs for sending high-quality HD video, audio and data transmission in highly demanding tactical environments. Software defined surveillance technology allows in-the-field system personality changes and upgrades without requiring hardware modification. Designed for rapid deployment, the rugged and compact HDT-1000 easily meets the tactical requirements for covert and overt surveillance of law enforcement, public safety, homeland security, and defense operations. The HDT-1000's low power consumption results in extended battery life and its small size make it ideal for concealments and portable use.

The HDT-1000 transmits High Definition (HD) video with up to 1080p resolution or Standard Definition (SD) video at 480i and supports a variety of video frame rates. Highly efficient H.264/MPEG-4 encoding provides real performance advantages over legacy MPEG-2 technology, including enhanced video quality and increased signal range and reliability. Multiple digital encryption options are available to prevent unauthorized intercepts when security is a must.



HD/SD Digital Video Transmitter

HIGH PERFORMANCE ADVANCED FEATURES

- RangeMaster™ maximizes the transmission range, and sends video signals up to four times farther than COFDM/DVB-T transmission.
- DoubleVision™ supports dual simultaneous SD video feeds through a single HDX-1000 transmitter.

Key Features

- Compact, Lightweight and Rugged Design
- Video / Audio / Data Transmission
- Multiple Encryption Algorithms
- Web Browser User Interface
- Up to 200 mW Output Power

Typical Applications

- Airborne Downlink Operations
- Covert and Overt Surveillance
- Law Enforcement and Public Safety
- Homeland Security and Defense

GENERAL

Modulation

- DVB-T (standard) 6/7/8 MHz bandwidth
- COFDM-EN300-744, QPSK, 16QAM, 64QAM

- RangeMaster - Narrow Band, programmable, 1-10 MHz bandwidth QPSK
- LMS-T 10 MHz COFDM (optional-consult factory)

Encryption (Available Options)

- AES 128/256 bit key

VIDEO ENCODING

H.264/MPEG-4

- SD/HD (standard feature)

AVC/MPEG - 4 (Part 10)

- Profiles supported:
 - Baseline profile
 - Main profile
 - Hi-Profile
- Video Bit Rates
- Up to 12 Mbps maximum

VIDEO INPUT FORMAT

Analog Composite

- (1 V p/p TIA/EIA RS170)
 - 720 x 480i NTSC 525
 - 720 x 576i PAL 625

SDI

- (SMPTE 259M - 270 Mbps)
 - 720 x 480i @ 25/30fps
 - 720 x 576i @ 25/30fps

HD-SDI

- (SMPTE 292M - 1.5 Gbps)
 - 1920 x 1080p @ 24, 25, 29.97, or 30 FPS

- 1920 x 1080i @ 24, 25, 29.97, or 30 FPS
- 1280 x 720p @ 50, 59.94, or 60 FPS

ASI

- 188 byte, EN50083-9

Wayside Data

- Up to 115.2 kbps (serial)

Video Input Impedance

- 75Ω unbalanced

AUDIO

Line Level

- Line or Microphone (x2)
- 600 Ω unbalanced

MIC Level

- -57 dB, REF 1V/Microbar
- 5KΩ unbalanced

Phantom Power

- 4.5 Vdc

MECHANICAL

Material

- Aluminium housing, anodized

Dimensions

- 4.125" W x 2.87" L x 0.675" H (10.48cm W x 7.29cm L x 1.71cm H)

Weight

- 0.75 lbs (340 g)

ENVIRONMENTAL

Operating Temperature

- 14° F to 149° F (-10° C to +55 °C) (Extended temperature range with optional heat sink)

Storage Temperature

- -40° F to 167° F (-40° C to +75 °C)

Humidity:

- 0 to 95% relative, non-condensing

Altitude

- 20,000 feet/ 6000 meters

FREQUENCY PARAMETERS

Band Support

Band	Frequency
P	300 to 400 MHz
L	1.7 to 1.9 GHz
S	2.0 to 2.5 GHz
C1	3.1 to 3.5 GHz
C2	4.4 to 5.0 GHz
*C3	6.425 to 6.525 GHz
For Custom Bands (Consult Factory)	

Frequency Stability

- 2.5 ppm

Frequency Step Size

- 250 KHz

POWER OUTPUT*

RF Output (High Power Mode)

- 200mW (+23 dbm)
- *C3 band 30mW (+15 dbm)

RF Output (Low Power Mode)

- 20mW (+13 dbm)
- *C3 band 8mW (9 dbm)

POWER SOURCE

DC Input

- +10 to +32V

POWER CONSUMPTION

L & S Band

- 10 Watts max.

C-Band

- 12 Watts max.

X-Band

- 14 Watts max

OPTIONS

- Heat sink - for extended temperature range (1.5" x 2.49" x 1.06")
- AC Power Supply
- Breakout Cable - specify Mic or Line Level

STANDARD EQUIPMENT

- DC Power Connector and Breakout Cable
- CD ROM User Manual

REGULATORY

- FCC Parts 15,90

CONTROLS

Local Interface

- 7 button local interface for control

LED Indicators

- Preset Number
- Audio Input Level
- RF Power Level
- Encryption

- Video presence
- Alarm

Remote User Interface

- RS-232, 10/100Base-T Ethernet

Configurable Presets

- 16 user selectable configurations

CONNECTIONS

Interface	Connector Type	
RF Output	SMA Female	
Video Input	Video A - NTSC/PAL Composite SD-SDI or HD-SDI (configurable) ASI - Input from external encoder	BNC Female (Configurable)
	Video B - NTSC/PAL Composite (MPEG-4 DoubleVision mode only)	21-Pin Receptacle
Control / Audio		
RS-232: I/O for remote control panel or PC interface		
Wayside Data Input		
Audio 1 & 2 Input		
Set-up & Maintenance (10/100 web browser interface)	RJ-45 (10/100)	
DC Power		
DC Power Input: +10 to +32V	4-pin LEMO female	

