Whether it's for contribution or distribution, full-time or occasional use, the LTN LEAF with integrated encoder and decoder options is the perfect solution for transmitting or receiving low-latency live video. The LTN LEAF combines access to the LTN video transmission network as well as SD or HD encoding and/or decoding into a single compact 1-rack-unit device.

The LTN LEAF requires minimal on-site setup. Once the appliance is connected at a user location, it automatically accesses LTN Global's fully managed global IP network via a business-class Internet connection. The user's site then is ready to transmit and receive live video, with LTN's IP transmission service providing rock-solid reliability, broadcast quality and global reach.
The LTN LEAF is an integrated appliance that provides the flexibility of multiple encode and decode configurations. The LTN LEAF provides a cost-effective, fully managed solution for transmitting or receiving broadcast-quality video. The encoder/decoder configurations and transport service are managed by LTN to provide a simple and reliable solution. Just connect to the SDI video ports on the appliance, and you can transmit and receive broadcasts to and from any site on the LTN Network.

The LTN LEAF provides a low-latency encode mode to support interactive interviews and live shots with lower end-to-end latency (SDI to SDI) than satellite. The LEAF also produces very high-quality encoding for fast-motion sports and complex tape playout content at bitrates up to 20 Mbps. The LTN LEAF can also provide high-quality multi-codec decoding of up to four simultaneous feeds.

**Managed Encoder/Decoder**
The LTN SD/HD-SDI encoder and decoder options are specifically designed to work as part of the LTN service. The encoder and decoder work with other LTN encoders and decoders, as well as third-party MPEG transport stream-compliant hardware encoders and decoders.

**24x7 Support**
The LTN LEAF is supported by LTN's dedicated 24×7 customer support team as part of a fully managed service.

**Customer Traffic Monitoring**
LTN's web-based portal provides real-time monitoring and displays the status of every one of the flows going through the LEAF, including a detailed view for each video flow.
LTN Appliance
Control and Monitoring: LTN Customer Management and Monitoring Web Portal
Power: 150W max power draw (100-240VAC @50-60Hz)
Physical: 1 RU chassis, 1.7” H, 16.8” W, 10” D (43mm x 426mm x 254 mm), 16lbs
Mounting: 2 or 4 post rackable. Fits square/round racks
Ports: Front or rear port configuration available
Transport: 1 Gig Ethernet, IP MPEG-2 Transport Stream
ISO/IEC standard 13818-1
Multiple TS channels can be transported simultaneously

LTN LEAF
LTN appliance with integrated encoder and decoder options
SDI Ports: 3G/HD-SDI BNC (SMPTE 292M 1.485Gpbs / SMPTE 259M 270 Mbps)
Bi-directional (IN or OUT) ports

Encoding Unit Specs *
Encode up to 20 Mbps H.264, MPEG-TS
SD Encode:
- 720x480i@29.97 fps & 720x576i@25 fps (NTSC/PAL Compatible)
- H.264/MPEG-4 AVC, 4:2:0 Chroma: Main Profile, L3
HD Encode:
- 1080p@25, 29.97, 30 fps
- 1080i@25, 29.97, 30 fps
- 720p@50, 59.94, 60 fps
- H.264/MPEG-4 AVC, 4:2:0 Chroma: High Profile, Level 4.2, up to 20 Mbps
Group of Pictures:
- H.264: P, IBP, Adaptive B Frames
Ancillary Data:
- Closed Captions: CEA-608 (SD), CEA-708 (HD)
- Active Format Description (AFD)
- SCTE 104 -> SCTE 35 (simple profile, unidirectional) trigger encoding
- SMPTE 2038 VANC encoding

Audio
Audio Input (Digital):
- 16 channel (8 pair), SMPTE 272M (SD), SMPTE 299M (HD)
- AC3(A/52) 48kHz digital pass-through (SDI lines 1-4)
Audio Encoding:
- MPEG 1 Layer 2, 48kHz, Common bitrates: 128, 192, 256, 384 Kbps

Decoding Unit Specs *
Decode up to 40 Mbps MPEG-TS
SD Decode:
- NTSC @29.97 or 23.976 fps, PAL 25.00 fps
- H.264/MPEG-4 AVC, 4:2:0 Chroma: Main Profile, L3
HD Decode:
- 1080p@25, 29.97, 30, 50, 59.94, 60 fps
- 1080i@25, 29.97, 30 fps
- 720p@50, 59.94, 60 fps
- H.264/MPEG-4 AVC, 4:2:0 & 4:2:2 Chroma: Main or High Profile, L4.1
- HEVC, 4:2:0 & 4:2:2 Chroma: Main or High Profile
Ancillary Data:
- Closed Captions: HD (CEA-608 / 708)
- Active Format Description (AFD)
- SCTE 35 -> SCTE 104 (simple profile, unidirectional) trigger decoding
- SMPTE 2038 VANC decoding

Audio Output (Digital):
- SMPTE 272M (SD), SMPTE 299M (HD)
Audio Decoding:
- 16 channel output (8 pair)
- Audio Codecs AAC, AAC-LC, MPEG-1 layers I & II, MPEG-2 layer II, MPEG-2 AAC-LC ADTS, MPEG-4 AAC-LC and HE-AAC ADTS

Number of encode, decode, and pass-through channels determined by specific customer setup.
* For LTN Model LTN-570-C3.