

# SMN IPE400

## Satmission Live Now IP Encoder



Send compressed video over Internet and other IP nets.

Satmission Live Now IP Encoder Series are MPEG-encoders which send H.264-compressed video in high quality over Internet and other IP networks.



SMN IPE400, format19" rack with all connectors on the rear side. Power supply is built in and 100 – 240V AC

### Model description.

Satmission Live Now SMN IPE400 encoder has Digital in SDI (HD/SD), Broadcast HD/SD out 1080i and Web-TV HD/SD is available as option.

Functions for broadcast on Newline IP Encoder SMN IPE400 and SMN IPE400 mobile

- Can send streams using UDP for shortest possible delay
- Support for interlaced video and anamorphic resolutions

Functions for web TV on SMN IPE400 web

- Can send video using RTMP to Adobe Streaming Server and
- Wowza Media Server
- Can be configured with many different resolutions and framerates
- Can record files in .flv-format



Other characteristics

Satmission Live Now IP Encoder Series have software based video encoding. They are easy-to-use, energy efficient, robust and silent.

Simplified Video mixer

Up to 4 camera / video signal productions

Network bonding

- Multiple outputs: H.264, TCP unicast
- Adaptive bitrate, Network bonding
- Scales input signal to encoding resolution of choice
- Easy to configure via display and keypad
- Can be controlled via web interface over network
- Create profiles for different broadcast locations or destinations
- Peak Program Meter (PPM) to calibrate sound level
- Record files, e.g. USB storage
- Recorded files can be downloaded from web interface
- Satmission Live Now Manager for statistics, supervision and troubleshooting
- Backup settings and software upgrade via web interface or Live Now Manager
- Can send to a number of different types of receivers
- Advanced users can create their own encoding settings
- Test picture can be encoded and customised
- Management via IP2 (second network interface)
- IPMI
- FEC (Forward Error Correction)

# Technical Specifications

Digital in SDI embedded	SMPTE 259M, SMPTE 272M PAL and NTSC 0-16 audio channels
Digital in HDSDI embedded	SMPTE 292M, SMPTE 299M 720p/50, 720p/59.94, 720p/60, 1080p/23.98, 1080p/24, 1080i/25, 1080i/29.97, 1080i/30 0-16 audio channels
Digital video out MPEG2 (option)	MPEG2 video CBR (ISO/IEC 13818-2) MP@ML, MP@HL, HP@ML, HP@HL (4:2:0) 422@ML, 422@HL (4:2:2)
Digital video out H.264	H.264/MPEG4 AVC video (ISO/IEC 14496-10) MP@L3.2, HiP@L4.1 (4:2:0)
Digital audio out	MPEG1 audio layer 2 (ISO/IEC11172-3) AAC (ISO/IEC 14496-3:2005) MAIN
Transport out	MPEG2-TS over IP (ISO/IEC13818-1) – TCP and UDP (UDP only on broadcast models) RTP (RFC 3550, 2250, 3640, 3984) (option) RTMP (option on broadcast models)
Interface out	Dual Ethernet 10/100/1000, RJ45
Hard disk for archiving	External USB2.0
Size rack (without removable rack brackets)	425 x 380 x 45 (w x d x h) Fits in 19" rack (1 height unit)

## Options

Live Now IP Encoder is primarily customised using options. Other customer tailored solutions are made on order.

### Full Duplex Intercom

Live Now IP Receiver can connect to other Live Now IP Receiver units for audio communication. The option gives two full duplex mono channel, for example control room and studio return.

### Case

All Live Now IP Encoders can be delivered in custom cases

### Multiple video inputs

Live Now IP Encoder can be customised with multiple video inputs, which gives the possibility to send multiple different video streams.

### Transcoder

Live Now IP Encoder can encode the input signal to one or multiple other encoding modes. For example if one want to record in higher quality or send in multiple qualities.

### Internal hard disk

Live Now IP Encoder which is often used for recording video can be equipped with internal hard disk or a RAID system with multiple disks.

### RTP or RTMP out

Live Now IP Encoder can have support for sending video streams using RTP and/or RTMP as transport instead of MPEG-TS. RTP and RTMP streams can be received and redistributed by streaming servers for web TV. RTP is for sending to Apple Quicktime Streaming Server and Darwin Streaming Server. RTMP works fine with Adobe Flash Media Streaming Server and Wowza media server. RTMP is standard on web model.

### Encryption

The video stream between Satmission Live Now IP Encoder SMN IPE400 series and Satmission Live Now IP Receiver SMN IPR200 can be encrypted and authenticated in a very secure way if needed.

### Automatic file sync using FTP

This option provides a feature for synchronising recorded files to a FTP server. When a new file is ready on the Live Now IP Encoder or router and live streaming has stopped, it automatically uploads the file.

### MPEG2

MPEG2 is still often used for distribution to cable TV. It can also be wise to record in MPEG2 format since it's usually faster to import and work with in different video editing programs.

Note: Specifications subject to change without notice

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