

# ENC-300-HDSDI-Portable



## COMPACT MPEG-4 AVC H.264 SD/HD ENCODER

The ENC-300-HDSDI-Portable encoder is designed for LIVE streaming applications where single CAMERA signals or MONITORING feeds are distributed or published on a network or the internet. The ENC series provides real-time compression of video and audio inputs. You can view these streams directly -via network- on PC's, TV's or other display devices. The ENC-300-HDSDI-Portable is a compact, low cost and light weight H.264 SD/HD video streaming encoder. It processes inputs from D1 up to Full-HD resolution for professional MPEG-4 AVC H.264 SD/HD streaming to any kind of device. ENC-300-HDSDI-Portable encoders are built for robust 24/7 LIVE operations and can be used in tough environmental conditions. They are designed without any moving parts, making them disk-, fan- and noiseless.

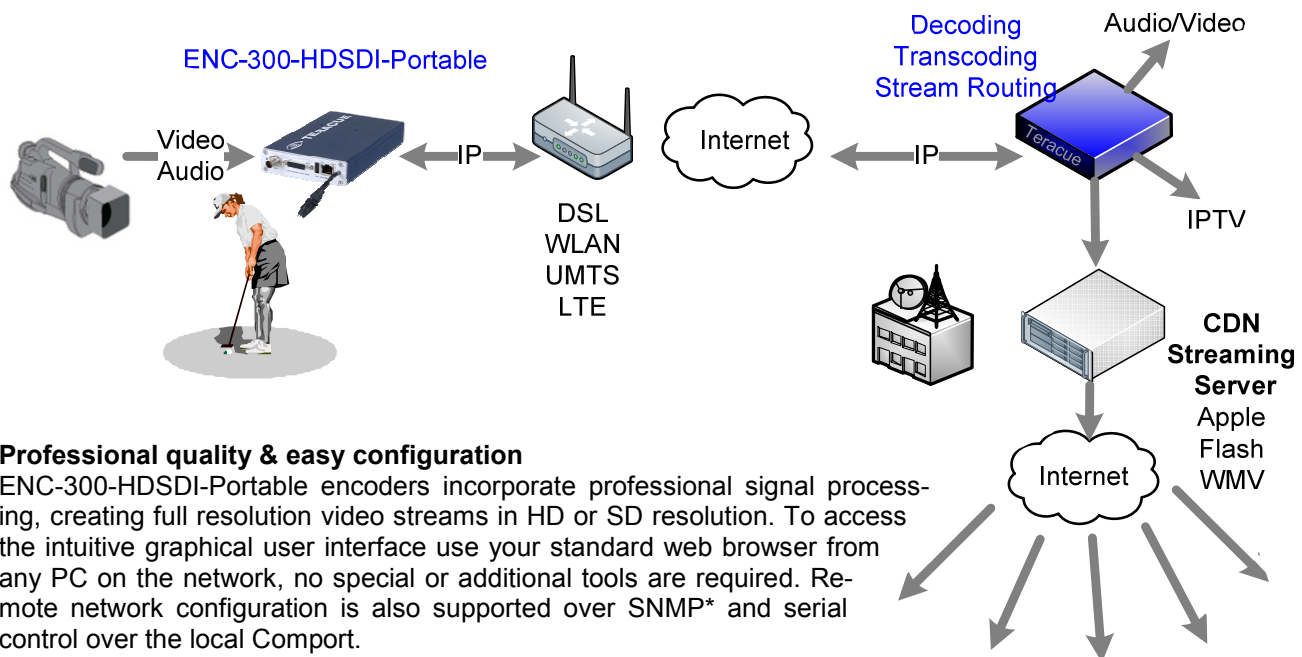


### Unique Features:

- Direct and real-time encoding of SD-SDI, HD-SDI, CVBS, YPbPr, YC and analogue RGB/VGA\* signals
- SDI and YPbPr resolution: up to 1080i
- RGB/VGA resolution: up to 1280x1024@60
- Adjustable framerate\* (e.g. 5 fps)
- Low-latency compression technology
- Supports 3G-SDI
- IPTV streams fully ISO/IEC compliant
- Low power consumption

### Main Features:

- Robust HD encoding solution for 24/7 streaming
- Transmission of multicast / unicast streams
- Supports H.264 SD/HD
- Supports AAC-LC
- Supports UDP and RTP\* transport streaming (TS)
- Supports SNMP\* and RS-232/RS-422\*
- Talkback for audio conferencing
- Configuration by web interface



### Professional quality & easy configuration

ENC-300-HDSDI-Portable encoders incorporate professional signal processing, creating full resolution video streams in HD or SD resolution. To access the intuitive graphical user interface use your standard web browser from any PC on the network, no special or additional tools are required. Remote network configuration is also supported over SNMP\* and serial control over the local Comport.

### TALKBACK\* audio conferencing, integrated COM\* server and GPIO\*

The ENC-300-HDSDI-Portable supports TALKBACK\*. This allows audio conferencing and communication between encoder standpoint and viewer. TALKBACK to ENC encoders is supported by PC's, as well as from the DEC decoder series. The Comport\* supports remote control of PTZ cameras and other peripheral serial equipment through it's integrated a switchable RS-232/RS-422 port\*. The GPIO\* interface enables contact closure function from the web GUI or pass thru from a decoder.

### Extremely robust and durable

The portable encoders are designed without any moving parts to ensure system uptime, reliability and noiseless operation. The light weight and compact design allows an extended temperature environment. The low power consumption supports longer battery operation.

**PRODUCT NAME:** ENC-300-HDSDI-Portable  
MPEG-4 AVC H.264 SD/HD encoder with SD/HD SDI input (with embedded audio) and Composite\*, S-Video (YC)\*, Component\* (YP<sub>bP<sub>r</sub></sub>) or analogue VGA\* (RGB) input.

The ENC-300-HDSDI-Portable is delivered with the BREAK-OUT cable 'S' for additional inputs/outputs via the DB26 connector. Teracue also offers a professional BREAK-OUT cable 'P-3E' or BREAK-OUT cable 'VGA' which must be ordered separately.

S - YC (MiniDIN), CVBS (RCA plug), Analogue Audio In/Out (RCA plug)  
P3E- YP<sub>bP<sub>r</sub></sub>, YC, CVBS, RGB (all BNC), Analogue Audio In/Out (RCA plug), GPI In/Out (Sub D 9pin), RS-232/-422 (Sub D 9pin)  
VGA\* RGB, H Sync RGB, V Sync RGB (Sub D HD 15pin VGA connector)

BELT-HOLDER - optional belt holder for the ENC-300-Portable

## ENCODING SPECIFICATION:

Standards: PAL, NTSC

Video Inputs: SD/HD/3G-SDI Input: 0,8 V<sub>P-P</sub>, 75 Ohm (BNC, embedded audio support) (SMPTE259M, SMPTE292M, SMPTE424M);

Break-out cable inputs:\*  
Composite: 1 V<sub>P-P</sub>, 75 Ohm  
S-Video: 1 V<sub>P-P</sub> (Y), 0,3 V<sub>P-P</sub> (C - Pal), 0,286 V<sub>P-P</sub> (C - NTSC), 75 Ohm  
Component: 1 V<sub>P-P</sub> (Y), 0,7 V<sub>P-P</sub> (P<sub>bP<sub>r</sub></sub>), 75 Ohm  
VGA (RGB)\*: 0,7 V<sub>P-P</sub>, 75 Ohm, Sync: 0,3 V<sub>P-P</sub>

Video Encoding: H.264 (MPEG-4 AVC Part 10; ISO/IEC 14496-10)  
Video Encoding Bitrates: 250Kb/s – 10Mb/s, CBR/VBR, low latency support

Video Resolutions: 1920x1080p 30/29.97/25Hz, 1920x1080i 60/59.94/50Hz, 1280x720p 60/59.94/50/30/29.97/25Hz, 720x480/576i 60/59.94/50Hz  
VGA (RGB) Resolutions: 1280x1024\* 60Hz, 1024x768\* 60Hz, 800x600\* 60Hz  
Frame rates can be reduced with the adjustable frame rate divider.

Audio Inputs: 1x Stereo\*, unbalanced, AC-coupled  
Audio nominal level: -10 dBV (0,316Vrms), Maximum level: 2 V<sub>P-P</sub>  
Microphone nominal level: -60 dBV (1mVrms), Gain Control for microphone and line input  
Minimum load resistance 20kΩ  
SDI embedded Audio 2CH (SMPTE 272M, SMPTE 299M)

Audio Encoding: MPEG-4 AAC LC (ISO/IEC 14496-3)

Supported Sample Rates: 48 kHz, 16Bit Sample Rate, 16-576 kbit data rate

Audio Outputs (TALKBACK)\*: 1x Stereo, unbalanced, AC-coupled  
Output gain adjustment\* from (off) -78 dB to +9 dB  
Talkback\*: 16 bit stereo, PCM, Sample Rate 48kHz

Multiplex Format: ISO/IEC 13818-1 Transport, ISO/IEC 14496-10 NAL (Network Abstraction Layer)  
Stream Types: Transport Stream and Elementary Audio/Video\* Stream

## I/O SPECIFICATION:

Network: 10/100TX Ethernet, RJ45, half/full duplex, Auto-sensing or manual control  
Streaming Traffic: Unicast and Multicast traffic supported  
IP Protocols: HTTP, TCP/IP Control Protocol, UDP/IP Streaming, RTP\*, IGMPv2, SAPv2\*, Unicast/Multicast, SNMPv2\*, DHCP  
USB\*: 1x USB 2.0 (Blade Connector), High Speed, Type A socket

RS-232/RS-422 Port\*: RS-232/-422 connection via console (Remote control for non IP devices via TCP/IP serial command tunnelling\*)  
GPIO\*: 1x In, isolated, TTL 4 mA, 1x Out, isolated, TTL 20 mA

**MANAGEMENT:** Software updates via web browser  
Fault measurement with log file generation\*, authorization via user password, RTC (Real Time Clock) support

## ENVIRONMENTAL:

Agency Approvals: CE, RoHS, EN 55103-1, EN 55103-2, EN 55022  
Humidity: Up to 90%, non-condensing  
Temperature: -25 to +45°C environment temperature  
Weight: Approx. 650 grams  
Dimensions (H/W/D): 28mm x 105mm x 180mm  
Power: 5Vdc ± 5% / 8W per blade

Limited Warranty: 1 year standard limited warranty. Warranty extensions available.

\*\*\*PLEASE NOTE: Live Streaming/Multicast Streaming requires specially designed and configured networks. Minimum Requirements include: Layer-3 Switched Ethernet, Multicast Enabled, IGMPv2/3, Network and Multicast Routing Supported.

\* = Will be supported in future firmware versions.

\*\* = On request