

# Internet Streaming Encoder

**IMPULSE 300E** 

The Impulse 300E is a cost-effective and easy-to-deploy MPEG2 and H.264/AVC encoder for acquiring, compressing and delivering baseband video and audio content. With streaming protocols such as SRT and RIST, its even easier to deliver broadcast content from remote sites or feed existing systems. Dual gigabit Ethernet ports provide infinite flexibility of both management and compressed video interfaces. An intuitive web interface is secured by HTTPS and all network services are user-configurable to ensure security on the open internet.



The Impulse 300E is ideally suited for encoding PEG channels, which have traditionally been delivered by simple devices with lackluster features and performance. The 300E is tailor-made with a small form-factor, powerful ASIC-based encoder and cutting-edge internet streaming protocols that enable better video quality at a competitive price-point.

#### **Key Features**

- Encode SD-SDI, HD-SDI and HDMI inputs
- Support for all of today's most common internet delivery protocols, including SRT and RIST
- Pair with a Sencore Impulse 300D for a low-cost end-to-end delivery
- Simple and intuitive webUI for configuration and monitoring
- Automation and remote configuration ready
- Small form factor 1/3rd RU wide and 1RU tall

#### **Applications**

#### Public, Educational and Governmental (PEG) Encoding

The Impulse 300E is ideally suited for encoding of PEG channels that have traditionally been served by antiquated, feature poor devices. The small form factor, exceptional ASIC-based encoding and cutting-edge internet streaming protocol support allow for better video quality and lower delivery costs of price sensitive channels.

#### Remote Event Encoding

Small form factor, plug-and-play operation and internet delivery protocol support make the Impulse 300E the ideal choice for encoding remote event feeds. Simply send the Impulse 300E to a remote site, have a technician plug in the cables and the unit is up and running, delivering feeds across the open internet to a remote or cloud headend.

### **SPECIFICATIONS**

## Internet Streaming Encoder Impulse 300E

Input Interfaces

SD/HD-SDI:  $1x 75\Omega$  BNC SDI

SMPTE 259M SMPTE 292M SMPTE 424M

Digital Video: 1x HDMI Type A Connector with

positive screw retention

Supported Version: 1.4b

Copy Protection: HDCP Compliant

**Output Interfaces** 

IP:

Physical Interface: 2x RJ45, 10/100/1000

Auto-Negotiate

Output Format: UDP or RTP

Constant Bitrate

SMPTE 2022-2/CoP3 FEC

IP Encapsulation: 1 to 7 TS Packets per IP Packet

Protocols: Unicast & Multicast

SRT w/ SRT Hub Integration

**RIST** 

IGMP compatibility: Version 1, 2 & 3

TS Bitrate: 250 Kbps to 50 Mbps

Video Processing

Input Codec/Profile: MPEG-2 up to MP@HL

H.264 up to HP@L4.1

Resolutions: 1080p@23.98, 24, 25, 29.97, 30, 50,

59.94, 60

1080i@25, 29.97, 30

720p@23.98, 24, 25, 29.97, 30, 50,

59.94, 60 576p@50 576i@25 480p@30, 60 480i@29.97, 30 0.5 to 15 Mbps

Bitrate: 0.5 to 15 Mbps

Output Codec/Profile: MPEG-2 up to MP@HL

H.264 up to HP@L4.1

**Audio Processing** 

Codecs: Dolby Digital (AC-3)

Dolby Digital Plus (E-AC-3)

AAC HE-AAC MPEG-1 L2

Number of Services: 2x audio services/PIDs

Pass-through: Closed Captions (CEA-708)

TS Manipulation

Table Regeneration: PAT, PMT

Management:

Connector: 2x RJ-45 10/100/1000 Auto Negotiating

Protocols: HTTP(S), SNMP and Web API

User Interfaces: Full control via web GU

Full control via intuitive front panel\*

Automation Interfaces: Full status and control via SNMP

SRT Hub Configuration and Control\*

Configurable SNMP traps

Web services API

Syslog message logging

Firmware Updates: Via Web GUI

Dimensions/Power

Height: 1 RU, 1.72" (44mm) Width: 1/3 RU, 5.69" (144.5mm)

Depth: 7.5" (190.5mm)

Power: 100-240 VAC 50/60 Hz

Supplies: 1x AC Internal Connector: IEC 320 C14

**Environmental Conditions** 

Operating Temperature: 32° to 122° F (0° to 50° C)
Cooling: Software regulated fan
Storage Temperature: -40° to 149° F (-40° to 65° C)
Relative Operating Humidity: <95% (non-condensing)

Ordering Information

IMPULSE 300E SD/HD/3G-SDI/HDMI Encoder

SDI2X-MOUNT 1RU Rack Mount Tray

Up to 3x SDI2X Units

\*Future release

