sencore®

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 75Ω 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
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