

Network Decoder

Impulse 300D

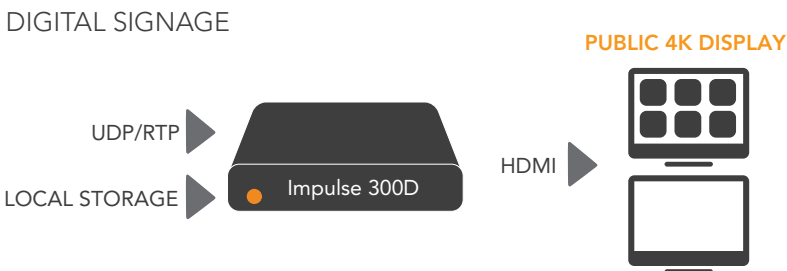
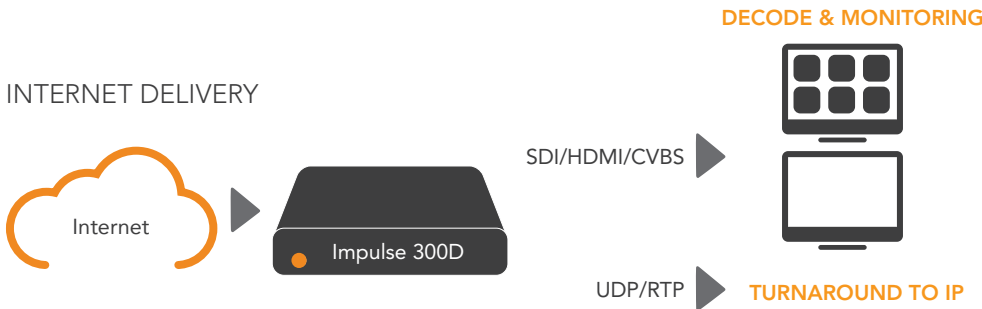


The Impulse 300D is a dynamic approach to the single channel decoder concept. At its core, the 300D is a versatile broadcast video processor, capable of receiving content over traditional facility multicast as well as OTT “internet” sources. The decoder itself offers a large range output ports including SDI, HDMI, and even analog video with RCA stereo for legacy applications. Offering a solid foundation of broadcast-tier features with support up to 4K/UHD via HDMI, the 300D is one of our most cross-compatible appliances in the Sencore portfolio. Use as a stand-alone DIY content delivery or rack-mountable up to three units in 1RU in traditional head-ends.

Key Features

- Support H.265(HEVC), H.264 (MPEG-4), MPEG2 decoding
- Decode signals into 3G-SDI, 2.0 HDMI and CVBS outputs
- Decoding up to UHD/4k resolution on HDMI output and up to FHD resolution on SDI output
- Support of 1 audio PID decoding for MPEG1L2,AAC, AC3 and E-AC3
- Support for all of today’s most common internet delivery protocols, including HLS, SRT and Zixi
- Simple and intuitive webUI for configuration and monitoring
- Small form factor - 1/3rd RU wide and 1RU tall

Applications



SPECIFICATIONS

OUTPUT INTERFACES

| | |
|-------------------------|--|
| SD/HD-SDI/3G-SDI: | 1x 75Ω BNC SDI SMPTE 259M SMPTE 292M SMPTE 424M |
| Digital Video: | 1x HDMI Type A Connector with positive screw retention |
| Supported Version: | 2.0 |
| Composite Video Output: | 1x 75Ω BNC NTSC, PAL |
| Analog Audio: | 2x RCA (L/R) |
| IP | |
| Physical Interface: | 1x RJ45, 10/100/1000 auto-negotiating |
| Output Format: | UDP or RTP |

Constant Bitrate

| | |
|---------------------|---------------------------------|
| IP Encapsulation: | 1 to 7 TS Packets per IP Packet |
| Protocols: | Unicast & Multicast |
| IGMP compatibility: | Version 1, 2 & 3 |
| TS Bitrate: | 250 Kbps to 30 Mbps |

INPUT INTERFACES

| | |
|---------------------|--|
| IP | |
| Physical Interface: | 1x RJ45, 10/100/1000 auto-negotiate |
| Output Format: | UDP or RTP |
| Constant Bitrate | |
| IP Encapsulation: | 1 to 7 TS Packets per IP Packet |
| Protocols: | Unicast & Multicast HLS SRT RIST* Zixi RTMP |
| IGMP compatibility: | Version 1, 2 & 3 |
| TS Bitrate: | 250 Kbps to 30 Mbps |
| Input redundancy* | |
| Descrambling: | AES 128/256 |

VIDEO PROCESSING

| | |
|----------------|---|
| Codec/Profile: | MPEG-2 up to MP@HL H.264 up to HP@L4.2 HEVC up to MP@5.1 AVS-P16 (AVS+), AVS2 Main-10bit Profile@ L 8.2.6 |
| Resolutions: | 2160p@23.98, 24, 25, 29.97, 30, 50, 60 1080p@23.98, 24, 25, 29.97, 30, 50, 59.94, 60 1080i@25, 29.97, 30 720p@ 50, 59.94, 60 576i@25 480i@ 29.97 |
| Aspect Ratio: | Automatic or manual (4:3 or 16:9) Bitrate: up to 30 Mbps |

AUDIO PROCESSING

| | |
|-----------------------|---|
| Codec/Profile: | Dolby Digital (AC-3) Dolby Digital Plus (E-AC-3) AAC HE-AAC MPEG-1 L2 |
| Audio Output Formats: | MPEG-2 up to MP@HL H.264 up to HP@L4.2 HEVC up to MP@5.1 AVS-P16 (AVS+), AVS2 Main-10bit Profile@ L 8.2. Linear PCM Dolby Digital pass-through* PCM (down mixed for 5.1 Sources) |
| Aspect Ratio: | |

| | |
|------------------------------|---|
| Audio Sampling Rate: | Analog (down mixed for 5.1 Sources) 48KHz |
| Audio Volume Leveling: | -12~12 dB |
| Number of Services: | 1x audio service/PID |
| Ancillary Data Pass-through: | AFD (SMPTE 2016)* Closed Captions (EIA-608, EIA-708) |

OPERATION MODES

| | |
|-------------|---|
| Live: | Decoding to HDMI/SDI or CVBS |
| Playback*: | Local: USB Flash, SD Card, In order HDMI/SDI/CVBS or IP outputs |
| Recording*: | Local: USB flash, SD Card Format: TS, MOV, MP4 Circling recording (by time or size of file) |

MANAGEMENT

| | |
|------------------------|---|
| Connector: | 1x RJ-45 10/100/1000 Auto Negotiating |
| Protocols: | HTTP(S), SNMP* and Web API* |
| User Interfaces: | Full control via web GUI Full control via intuitive front panel |
| Automation Interfaces: | Full status and control via SNMP* Configurable SNMP traps * Web services API* Syslog message logging |
| Firmware Updates: | Via Web GUI |
| Other I/O: | 1 x USB 2.0 1 x SD Card Standard Interface LCD x 1, Front button x 6 |

DIMENSIONS/POWER

| | |
|--------------------|-------------------------|
| Height: | 1 RU, 1.72" (44mm) |
| Width: | 1/3 RU, 5.69" (144.5mm) |
| Depth: | 7.5" (190.5mm) |
| Weight: | 1.3 lbs (0.6kg) |
| Power: | 100-240 VAC 50/60 Hz |
| Power Consumption: | Max. 9W |
| 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) |

*Future

ORDERING INFORMATION

| | |
|---------------|--|
| IMPULSE-300D | Impulse Decoder HDMI/CVBS output, UDP/RTMP/HLS/SRT inputs, Mpeg2/ H.264/H.265 video and MPEG1L2/ AAC audio decoding |
| IMPULSE 30100 | SDI output license |
| IMPULSE 30200 | IP output License |
| IMPULSE 30300 | AC3 License |
| IMPULSE 30500 | ZIXI license |
| IMPULSE 30600 | UHD decoding license (downconversion & HDMI output) |