

H.264 & MPEG-2 HD/SD DECODING BLADE AND PORTABLE DEVICE

The DEC-300 is a professional compact H.264 SD/HD and MPEG-2 SD/HD video/audio stream receiver and IPTV decoder. It is designed for network IP video system integration. As an output decoder device for streaming media it provides easy access to DVB IP and IPTV streams on HD-SDI and analog video outputs.

Unique features and benefits:

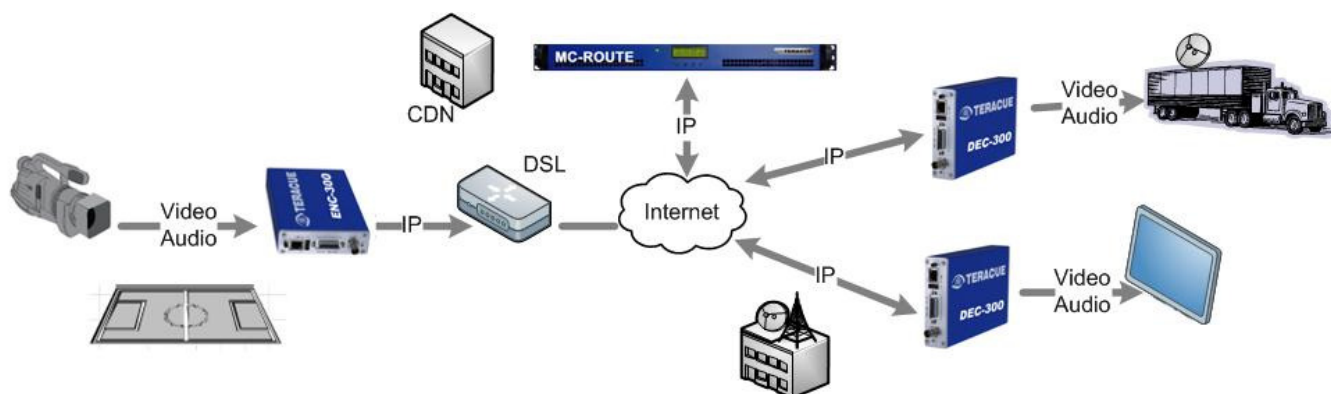
- Robust hardware solution for 24/7 operation
- Real-time hardware HD/SD device
- H.264 and MPEG-2 HD/SD decoder
- Forward error correction Pro-MPEG FEC
- Low delay support
- Talkback for audio conferencing
- Export & import of presets
- UDP & TCP (error correction) streaming
- Low power consumption
- Extended temperature range
- Management by web interface

Applications:

- Broadcast & CDN IP contribution
- Wireless & mobile streaming
- Digital signage streaming
- IPTV/OTT streaming
- Medical & campus TV
- Telemedicine
- Security monitoring
- Stadium & event TV
- Training & research
- Video monitoring
- Control rooms & command centres



Application example: Contribution over DSL with multiple destinations



Professional quality and easy configuration

DEC-300 decoders incorporate low-latency compression technology and professional signal processing, creating full resolution video output in HD resolution. To access the intuitive graphical user interface use your standard web browser from any PC on the network. Remote network configuration is also supported over SNMP, by Telnet and by control over the local COM port.

Portable and blade based operation

Multiple DEC-300 blades are operated inside the FR frame series. The decoder is also available in the compact PORTABLE device. High-density requirements are solved by operating the DEC blades in the FR-2000-24 (4 RU rack mount) or FR-610 (1 RU rack mount) multi-channel racks. Different types of DEC decoder blades, ENC encoder blades and DVB/IP videogateways can be "mixed and matched" inside the FR-frame series.

PORTABLE



1 RU Rack mount FR-610



ENC/DEC-200/300



4 RU Rack mount FR-2000-24



DECODING SPECIFICATIONS

Standards	PAL, NTSC, 720p 50/60, 1080i 50/60, 1080p 25/30
Video outputs	HD-SDI output: 0,8 V _{PP} , 75 Ohm (BNC , embedded audio support) Breakout cable outputs: Composite, S-Video, Component
Video resolutions	Full D1: 720h x 480/576v, Half-D1: 352h x 480/576v, CIF/SIF: 360/384h x 288/240v, QCIF: 176h x 144/120v 720p 50/60, 1080i 50/60, 1080p 25/30
Audio outputs	Unbalanced analog stereo, consumer line level
Audio inputs (Talkback)	Analog stereo, consumer line- and MIC-level
Video codecs	MPEG-2 (ISO/IEC 13818-2), Main Profile at Main Level (MP@ML), 4:2:0 High Profile at Main Level (HP@ML), 4:2:0 MPEG-4 AVC/H.264 (ISO/IEC 14496-10), Main Profile at Level 3.1 (MP@L3), Baseline Profile at Level 3.1 (BP@L3), 4:2:0 , High Profile at Level 4 (HP@L4)
Stream types	ISO/IEC 13818-1 Transport Streams Elementary A/V
Audio codecs	MPEG-1 Audio Layer 1, 2 (ISO/IEC 11172-3 Layer 1, 2) MPEG-4 AAC LC (ISO/IEC 14496-3)

I/O SPECIFICATIONS

Network	10/100TX Ethernet, RJ45, half/full duplex, auto-sensing
Streaming traffic	Unicast and multicast traffic supported, TCP, RTP
IP Protocols	HTTP (web browser), TCP/IP control protocol, UDP/TCP streaming, IGMPv2, SNMP, DHCP
Error correction:	Pro-MPEG FEC (forward error correction) and TCP
RS-232/422 port	RS-232 connection via console (remote control for non IP devices via TCP/IP RS-232/422 command tunnelling)
GPI in	1 INPUT, isolated
GPI out	1 OUTPUT, isolated
USB port	(For future use)

MANAGEMENT:

Web browser, SNMP, Telnet and RS-232, software updates via web browse
Fault measurement with log generation, authorization via user password, RTC (Real Time Clock) support

ENVIRONMENTAL

Agency approvals	CE, RoHS compliant
Humidity	Up to 90%, non-condensing
Temperature	-25 to +45°C environment temperature; fanless when operated as -PORTABLE
Blade weight	Approx. 130 grams
Blade dimensions (H/W/D)	20mm x 130mm x 190mm, Europe Card (160mm x 100mm, 3HE), Conform to IEC60297-3/-4
Power	5Vdc ±10% / 8W per blade
PORTABLE weight	Approx. 700 grams
PORTABLE dimensions	(H/W/D) 28mm x 104mm x 192mm
Limited warranty	1 year standard limited warranty. Warranty extensions for up to 5 years available.

ORDER INFORMATION

DEC-300	H.264 HD & MPEG-2 HD decoder blade with HD-SDI-, embedded audio-, analog video/audio output.
DEC-300-PORTABLE	H.264 HD & MPEG-2 HD portable decoder device with HD-SDI-, embedded audio-, analog video/audio output. Including power supply.
300-UPG-FEC	Upgrade option for ENC-/DEC-300-Series for forward error correction
BREAKOUT-CABLE-S-D	YC (miniDIN), Composite (RCA jack), analog audio out (RCA jack), analog audio in (3.5 mm phone jack) connectors incl. RCA jack to 3.5 mm phone plug adapter. Breakout cable S is included in delivery
BREAKOUT-CABLE-P-3D	Composite/YC/YP _{BPR} (all BNC female), analog audio out/in (RCA jack), GPI in/out (Sub-D 9-pin), RS-232/422 (Sub-D 9-pin) connectors
FR-610	1RU Rack mount chassis for max. 6 blades
FR-610-DPS	1RU Rack mount chassis for max. 6 blades with redundant power supply
FR-2000-24	4RU Rack mount chassis for up to 21 blades (depends on blade combination) with redundant power supply

COMPLEMENTARY PRODUCTS

ENC-300-DVI	H.264 HD/SD encoder blade with DVI/HDMI input. Also available as -PORTABLE encoder device.
ENC-300-HDSDI	H.264 HD/SD encoder blade with SDI, PAL/NTSC, Composite, S-Video, Component or analog VGA input. Also available as -PORTABLE encoder device.
MC-ROUTE-1RU	1RU appliance for live UDP, TCP, FEC, RTSP and HLS streaming and unicast/multicast bridging

***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.

