



FEATURES | BENEFITS

- AVC and MPEG 2 4:2:0 Decoding
- Eight (8) Channels of Audio Processing
- MPEG 1 Layer 2, AAC-LC, AAC-HE (v1/v2), Dolby (AC-3) and Dolby Digital+ (E-AC-3)
- Dolby D/D+/E and PCM Pass-Through
- Analog, AES and SDI Embedded Audio Outputs
- ASI and IP I/O (IP Supports SMPTE 2022 FEC)
- 32APSK Demod with DVB-CI CAM option
- SCTE 35 to SCTE 104 Conversion

APPLICATIONS

- DSNG
- Tier Two/Three Contribution
- Fiber and IP Transport
- Teleport Infrastructure
- Satellite to IP Turn Around

The RD-30 is a standard and high definition IRD that supports MPEG 2 and MPEG 4 AVC/H.264. Interoperable with other encoders, the RD-30 is ideal for mission critical trunking, ad-hoc OB, DSNG and teleport applications.

The lightweight, 10 pound (4.5 Kilo) RD-30 offers impressive features and specifications in its 1 RU chassis. Features include enhanced control and monitoring via its front-panel, browser and SNMP interface, eight (8) channels of audio decoding, robust VBI support, up to 32APSK demodulation, reliability, and ease of use for an extraordinary value. In addition to MPEG 1 Layer 2, AAC-LC, AAC-HE (v1/v2) Dolby Digital and Dolby Digital+ decoding, the RD-30 supports pass-through audio for Linear PCM, Dolby E, Dolby Digital and Dolby Digital+ (2.0 and surround).

The optional DVB-S/S2 demodulator supports modes ranging from QPSK up to 32APSK with Multi-stream ISI based on demodulator hardware and software licenses.

RD-30 SD/HD MPEG 2 and MPEG 4 IRD

Video Decoder Profiles: *

MPEG 2 SD/HD Profile: ISO 13818-2 MP@ML and MP@HL
 MPEG 4 SD/HD Profile: ISO/IEC 14496-10 MP@L3 HP@L4.2
 Supported Resolutions:
 480i59.94, 576i50, 720p50/59.94/60,
 1080i50/59.94/60, 1080p23.97/24/25/29.97/30

Inputs

Sync Input: Auto-detects Bi-Level and Tri-level sync for Genlock
 Connector: 1x BNC (75 Ohm)

DVB-ASI

Interface: ASI (EN 50083-9 250 kb/s to 200 Mb/s)
 Connector: 1x BNC (75 Ohm)

IP

Standard: UDP, RTP and SMPTE 2022-1 2007 FEC
 Supports 1 to 7 TS packets per IP packet
 IGMP v1, v2 and v3 support

Input TS Rate: 250 kb/s to 150 Mb/s
 Connection speed: GigE (10/100/1000 Auto-Negotiate)
 Receiver capability: 2 simultaneous MPEG over IP transport streams
 Connector: 2x RJ45

Audio Processing Profiles: *

Supported Audio: Up to 4 pairs (8 channels) of audio
 MPEG 1 Layer 2 audio
 AAC-LC, AAC-HEv1, AAC-HEv2
 Dolby Digital AC-3 / Dolby Digital+ E-AC-3
 stereo downmix and passthrough
 Dolby E / Linear PCM passthrough

Conditional Access: BISS 0/1/E *

Outputs:

All outputs operate concurrently in SD. In HD, CVBS is not active.

SD-SDI / HD-SDI

Video & Audio SMPTE 259M - SD
 SMPTE 292M - HD
 Connector: 2x BNC (75 Ohm)

CVBS

SD NTSC, PAL-M, PAL-B/G,
 PAL-N Composite Video Output
 NTSC Pedestal selection
 Black at 7.5 IRE or Black at 0 IRE
 Connector: 1x BNC (75 Ohm)

DVB-ASI

Standard: Asynchronous Serial Interface per EN 500083-9
 ASI Mirrored from DVB-ASI Input, IP Input, or
 RF Input with purchase of optional tuner package.
 Connector: 1x BNC (75 Ohm)

IP Out

Standard: UDP, RTP and SMPTE 2022-2 (COP3 FEC)*
 Connector: Shares input connectors

AES Audio

Standard: AES3/EBU Unbalanced
 Connector: 4x BNC (75 Ohm)

Analog Audio

Four balanced pairs via two DB15 connectors. (2 pair per DB15)
 Connector: 2x DB15

VBI / VANC PROCESSING

SDI Ancillary support for:

Closed Captioning (CEA-708), AFD (SMPTE 2016),
 OP-47 (SMPTE RDD-08), SMPTE RDD-11,
 SCTE 127 (SMPTE 2031), EN301775 (SMPTE 2031),
 TimeCode(SMPTE 12M-2), SCTE35 to SCTE104 Conversion

CVBS/SDI VBI waveform support:

Line 21 captions (CEA-608), TVG2x,
 AMOL-48/96 (SCTE 127),
 Teletext/WSS/VPS (EN 301775)

DVB-S/S2 Hardware Option (RD30-01-LB) - Optional*

DVB-CI per EN 50221

Interface: 2x DVB-CI CAM slots
 Use: De-scrambles decoded service only without
 purchase of RD30-CAM-KEY. RD30-CAM-KEY
 provides up to maximum amount of decryptable
 services supported by CAM module.
 Supports all major CA vendors

DVB-S/S2 L-Band Tuner

Use: Four switched L-Band inputs available for decode
 Connector: 4x F Type, Female
 DVB-S EN 300 421 and DVB-S2 EN 302 307

Modulation Scheme support:

QPSK / 8PSK / 16APSK / 32APSK

Supported Roll-off: 5%, 10%, 15%, 20%, 25%, 35%

Symbol rate range: 1 - 45Msym/s

Frequency Range: 950 - 2150MHz

Input level: -65dBm to -25dBm

LNB Power and Control:

0, 13, 14, 18 and 19 VDC @ 450mA

22kHz (band selection according to universal LNB
 for ASTRA satellites)

VCM Demodulation Support

Multistream Support (Single ISI)

Physical:

Operating Temp.: -40 to +65 °C/-40 to +149°F

Power Supply (nominal): 100 - 240 VAC

Power Consumption (nominal): 40W (120V @280mA)

Weight: 6 lbs, base version

Measurements: (H X W X D) 1.72" X 17.2" X 14.6"

Management:

Front Panel controls
 Browser-based Web Interface
 SNMP

* Software keys are required to unlock full hardware support. Please contact your sales person for more info.

