



RD-30

SD/HD MPEG2 & MPEG4 IRD



FEATURES | BENEFITS

- AVC and MPEG2 4:2:0 Decoding
- MPEG1 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

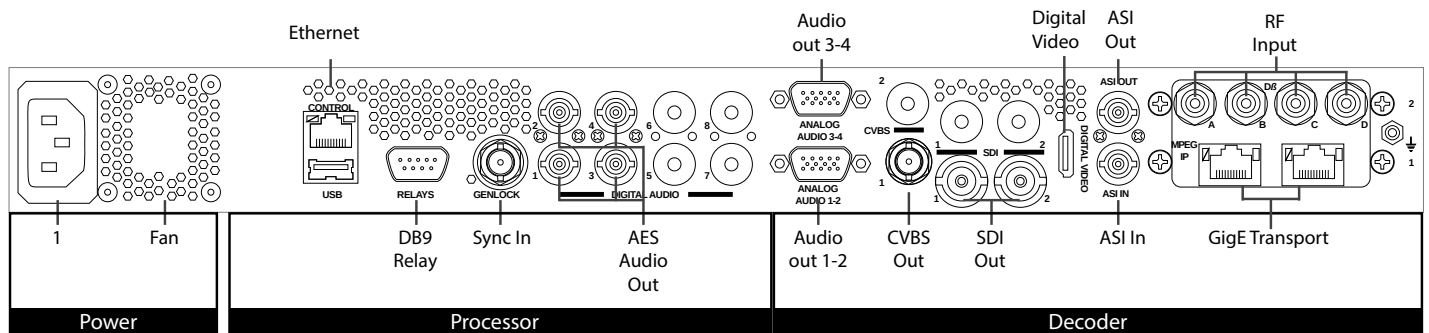
APPLICATIONS

- 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 MPEG2 and MPEG4 AVC/H.264. Interoperable with other encoders, the RD-30 is ideal for mission critical trunking, ad-hoc OB, DSNB and teleport applications.

The lightweight, 10 pound (4.5 kilo) RD-30 offers impressive features and specifications in its 1RU 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 MPEG1 Layer 2, AAC-LC, AAC-HE (v1/v2) Dolby Digital and Dolby Digital + (2.0 and surround).

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



RD-30

SD/HD MPEG2 & MPEG4 IRD

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 SCTE 104 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.