

DR8400

Professional 4:2:2 10-bit Integrated Receiver Decoder



H.264 10-bit HD/SD for Contribution over Satellite and IP networks

As the world's first H.264 4:2:2 10-bit Integrated Receiver/Decoder supporting all profile from Main to High422P, DR8400 is designed for contribution and distribution markets where premium quality and performance are more important than ever.

The DR8400 gives by default 3 different inputs type: built-in DVB-S/S2 demodulator, IP Gigabit and ASI with a TS bit rate up to 200Mbps. Combined with a decoding bit rate reaching 62.5Mbps with no compromise in CABAC, the DR8400 is addressing a large spectrum of Primary Contribution applications.

By offering the first H.264 4:2:2 10-bit solution, ATEME takes another technology step improving Video Quality over 8-bit. DR8400 in combination with CM4101 secures your Video Quality end to end, completing the Video Quality chain from Primary Contribution point to Distribution point.

KEY FEATURES

- H.264 4:2:2 / 4:2:0 8-bit / 10-bit SD/ HD support
- Two Built in RF demodulators
- Pro MPEG FEC and BISS - 0/1/E support
- MPEG-2 support
- Upgradeable to 1080p60
- HD to SD Broadcast downscale

BENEFITS

- No downscale in the Contribution chain.
- H.264 and DVB-S2 advantage to achieve up to 50% bandwidth saving on contribution links.
- With legacy MPEG-2 support, the DR8400 gives great flexibility on the field.
- DR8400 is upgradeable to 1080p60, providing the best CAPEX reduction



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VIDEO DECODING

H.264 Profiles: MP, HP, H10P, H422P, H10IntraP and H422IntraP.

- Decoding bit rate up to 62.5 Mbps
- 3:2 pull-down support

SD 576i and 480i

HD 1080p24, 1080i25 and 1080i30

HD 720p50 and 720p60

HD 1080p60

Aspect ratios: 4:3, 16:9

SD/HD MPEG-2 422P @ML /HL

EIA 608 and EIA 708 Close Caption pass through

AUDIO DECODING

Number of Audio Channels

SDI embedded or independent AES/EBU XLR outputs.

Up to 8 stereo pairs decoding Embedded

Up to 4 AES-EBU external audio outputs

5.1 decoding to stereo pair down mix

Audio Decoding

MPEG1 Layer II

MPEG2/MPEG4 AAC-LC

HE-AAC v1 & v2

Dolby E, AC3, AC3+ pass-through.

TRANSPORT STREAM INTERFACE

DVB-ASI Input:

2 independent inputs (redundancy)

BNC connector, 75 Ohm

TS bit-rate up to 200 Mbps

MPEGo IP Input*:

Two independent inputs ports for streaming (redundancy)

Gigabit Ethernet ports (100/1000 Base-T RJ45 connectors)

De-jittering buffer size: 0-1 seconds

Encapsulation: UDP, RTP

Unicast/Multicast

SPTS/MPTS

TS bit-rate up to 200 Mbps

FEC ProMPEG CoP3r2 (SMPTE2022)

DVB-S/DVB-S2 Input:

Connector: F-type, 75 Ohm

L-Band input

C-band, Ku-band, Dual Band

Fast Satellite Frequency locking

Two RF demodulators for redundancy or fast MPTS switching

Loop-through output

DVB-S:

- Constellation QPSK
- Symbol rate up to 45 MSps
- Viterbi and Reed-Solomon decoding

DVB-S2:

- Constellation QPSK, 8PSK
- Symbol rate range for QPSK up to 45 MSps
- Symbol rate range for 8PSK up to 37 MSps
- LDPC and BCH decoding
- Roll-Off: 0.35, 0.25, 0.20

Frequency Range: 950-2150 MHz (L-Band)

RF input level: -65 dBm to -25 dBm

TS bit-rate up to 108 Mbps

PHYSICAL INTERFACE

Video and audio output:

3 BNC interfaces, 75 Ohm, configurable between:

- ASI output (ASI input loop through)

- SD-SDI

- HD-SDI

- 3G or dual-link SDI

HDMI 1.3 output

4 AES/EBU XLR, balanced 110 Ohm

Synchronization input: BNC 75 Ohm

Black-burst (SD mode)

Tri-level (HD mode)

EMBEDDED DVB DESCRAMBLING

BISS Mode-1

BISS-E

CONFIGURATION AND MANAGEMENT

SNMP (MIB v2c) with remote SNMP supervisor

Embedded web-server configuration

Front panel with LCD/keypad

Web interface requires Flash plug-in in Web browser

ADVANCED POWER BLOCK

Fully internal redundant supply units with current sharing for optimal MTBF.

Automatic single-sector configuration on any sector input.

Sector inputs and internal supplies status available from software.

PHYSICAL

Dimensions 19" 1-RU (482x445x 508 mm /19"x1.75"x 20")

Weight 7.5 kg/16.5 lbs

ENVIRONMENTAL

Cooling air flow from front side to rear side.

Operating temperature 5 to 40 °C / +41 ° to +104 °F

Storage temperature -20 to 70 °C / +32° to +158 °F

Operating humidity 5 to 90% (non condensing)

Input voltage range 100-240 VAC, 50/60 Hz

Typical consumption 130 W

CERTIFICATIONS

ROHS

CE and FCC Class B Certifications, EMC Compliancy:

- EN 55022: 2006 classe A ,

- EN 55024: 1998 / A1 : 2001 / A2 : 2003,

- FCC PART 15 Class B: 2006,

- EN 61000-3-2: 2000 / A2: 2005,

- EN 61000-3-3: 1995 / A1: 2001

Safety:

- IEC 60950-1: 2001

*Contact Factory for availability