kyrion

DR8400

SD/HD MPEG-2 / MPEG-4 Decoder
for contribution over Satellites and IP networks

The Kyrion™ DR8400 is a Universal Integrated Receiver/Decoder supporting all MPEG profiles including MPEG-4 4:2:2 10-bit and latest HEVC. The DR8400 is designed for contribution markets where premium quality and performance are more important than ever.

The DR8400 gives by default 3 different input types: built-in DVB-S/S2 demodulator, IP Gigabit and ASI with a TS bit rate of up to 200Mbps. Combined with a decoding bit rate reaching 110Mbps with no compromise in CABAC, the DR8400 is addressing a large spectrum of contribution applications or primary distribution.

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

KEY FEATURES

• SD/HD support MPEG-2 / MPEG-4 up to 4:2:2 10-bit

• HEVC support

• Two Built in RF demodulators

• Pro MPEG FEC and BISS - 0/1/E support

• IP streaming Output

• HD to SD Broadcast quality downscaler

BENEFITS

• No quality loss in the 10-bit 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.

ateme
Keep content looking great wherever it's played

kyrion
DR8400

VIDEO DECODING

H.264 Profiles: MP, HP, H10P, H422P, H10IntraP & H422IntraP.
(Bit rate up to 120 Mbps Long GOP /150 Mbps in AVC-I)
HEVC*
MPEG-2 422P@ML /HL

SD 576i and 480i
HD 1080p24, 1080i25 and 1080i29,97
HD 720p50 and 720p60
Aspect ratios: 4:3, 16:9

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, DD(AC3),DD+ (AC3+) pass-through.

ANCILLIARY DATA SUPPORT

Close Captions, VBI, AFD, WSS, DPI, WST, VPI

TRANSPORT STREAM INTERFACE

DVB-ASI Input: (EN 50083-9)
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)

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
4 AES/EBU XLR, balanced 110 Ohm
Synchronization input: BNC 75 Ohm
Black-burst (SD mode)
Tri-level (HD mode)

RF INTERFACE

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

EMBEDDED DVB DESCRAMBLING

BISS Mode-0/1
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

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

* Contact factory for availability