

Kyrion

DR5000



SD/HD MPEG-2 / MPEG-4

High performance Integrated Receiver Decoder for efficient Contribution and distribution links

The Kyrion™ DR5000 is the ATEME latest hardware Integrated Receiver Decoder dedicated to professional contribution over satellite, IP and ASI networks. Kyrion DR5000 is a single channel decoder with outstanding capabilities providing easy setup and fast signal lock while achieving great robustness.

Kyrion DR5000 is able to receive video feeds on 4 selectable RF inputs, 2 ASI inputs and 2 IP inputs. Capable of decoding all profiles from Standard Definition to High Definition, either MPEG-2 4:2:0 or 4:2:2 or MPEG-4 4:2:0 and 4:2:2 up to 10-bit, addressing any field use case.

Leveraging ATEME 's unique FPGA design, Kyrion DR5000 permits a complete software upgradeability SD to HD or 4:2:0 to 4:2:2, providing the broadcasters, satellite up-links, service operators, and the DSN users to benefit from the state-of-art of video compression standards.

KEY FEATURES

- Standard and High Definition
- MPEG-2 /MPEG-4 up to 4:2:2 10-bit
- Very Low Latency
- 4 RF, 2 ASI, 2 IP Inputs
- 3 SDI, 2 ASI, 2 IP outputs
- DVB-Common Interface option
- Analogue audio output option

BENEFITS

- Higher Video quality with 10-bit decoding
- Total interoperability
- Easy configuration with intuitive interfaces
- Fast booting time for instant use
- Instant video and audio monitoring
- Software upgradeability
- Low power consumption

VIDEO DECODING

MPEG-4 AVC/H.264

(4:2:0 8-bit, 4:2:0 10-bit, 4:2:2 8-bit, 4:2:2 10-bit)*

MPEG-2 (4:2:0 8-bit & 4:2:2 8-bit)*

Bitrate: 1 to 60Mbps

AUDIO DECODING

MPEG-1 Layer II, AAC

Dolby Digital E, DD, DD+, AC3, AC3+, PCM pass through

SETUP AND OPERATION

10 s booting time

Web Graphic User Interface

Video and Audio Confidence monitoring on front panel and web GUI

128 Presets configurations memory slots

Presets import and export from USB port

In-band and Out-Of-Band Management

SNMP (MIB v2c) with remote SNMP supervisor

MIB download from web GUI

INPUTS / OUTPUTS INTERFACES

IP interface:

1 x 100/BaseT Ethernet out-of-band for management

2 x 1000BaseT Ethernet for MPEG-2 TS / MPTS forward

ASI interface:

2 x DVB-ASI inputs

2 x ASI outputs with MPTS de-encryption/ Descrambling

Audio interface:

SDI Embedded up to 16 mono channels

AES-EBU output on BNC up to 8 mono channels

Optional analogue audio output up to 8 mono channels

Audio decoded:

Up to 16 mono channels on SDI and AES

Audio Pass through:

Up to 16 mono channels SDI

Up to 8 mono channels AES

Video output

2 x 3G-SDI, 1 x HD-SDI

Synchronization

Genlock, BlackBurst Tri-level input

Genlock, BlackBurst Tri-level Loop output

RF input

1 RF demodulator with 4 selectable RF inputs

Loop-through output

Fast Satellite Frequency locking

L-Band input, C-band, Ku-band support

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

RF input level: -65 dBm to -25 dBm

C/N, BeR, C/N margin, Link margin monitoring

Automatic or Manual DVB-S or DVB-S2 selection

Adjustable search Range

Downlink frequency calculator

DVB-S (DSNG EN 300174)

Constellation 8PSK, FEC 3/5, 2/3, 3/4, 5/6, 8/9, 9/10

DVB-S (EN 300421)

Constellation QPSK

Symbol rate up to 45 MSps

DVB-S2 (EN 302307)

Constellation QPSK, 8PSK, 16APSK, 32APSK

Symbol rate range for QPSK up to 67,5 MSps

Symbol rate range for 8PSK up to 67,5 MSps

Symbol rate range for 16APSK up to 47 MSps

Symbol rate range for 32APSK up to 38 MSps

Roll-Off: 0.35, 0.25, 0.20

DESCRAMBLING

DVB-CI Common Interface Hardware option to descramble

MPTS with support of major CAS vendors:

Conax, Irdeto, NDS, Viaccess **

Multi-services descrambling



Kyrion DR5000 with DR-5000-CI Hardware option

PHYSICAL & ENVIRONMENTAL

19" 1-RU (482 x 44 x 310 mm/19"x1.73"x 12,8")

3,4 kg/8.5 lbs.

Cooling air flow from front to back

User Serviceable Air Filters

Power supply 100-240 VAC, 50/60 Hz

Typical consumption 36 W

Operating temperature 0 to 55 °C / +41 ° to +131 °F

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

Operating humidity 5 to 90% (non condensing)

KYRION DR5000 ORDERING REFERENCES

Software bundles						
	SD	HD	MPEG-2 4:2:0 8-bit	MPEG-4 4:2:0 8-bit	MPEG-2 4:2:2 8-bit	MPEG-4 4:2:2 10-bit
DR5000-1-SD-420	✓		✓	✓	✓	
DR5000-1-HD-420	✓	✓	✓	✓	✓	
DR5000-1-SD-422	✓		✓	✓	✓	✓
DR5000-1-HD-422	✓	✓	✓	✓	✓	✓

Hardware options	
DR5000-ANL	Analog audio outputs- up to 8 mono channels. Required AEXTD-CBL not included
AEXTD-CBL	8 XLR Balanced Breakout cable for External AES /Analog Audio input for DR5000-ANL
DR5000-CI	Common Interface with 2 CAM slots - Multi services Descrambling included

Software options	
DR5000-LIC-HD	High Definition 1080 and 720p support
DR5000-LIC-422	MPEG-4 4:2:2 8-bit support
DR5000-LIC-1632APSK	16APSK, 32 APSK DVB-S2 support

*Depends on version

**Contact Factory for availability