

IO [io] 8000/8001

Technical Specifications

Video

Composite Input

Systems	PAL, NTSC
Video level	1 V p-p (0.7 - 2.0 V p-p max.)
Frequency response	A / D 3 dB (10 Hz - 7 MHz)
Differential gain / phase	< 2% / < 2°
Impedance	75 Ohms unbalanced
Return loss	> 35 dB, 10 Hz to 6.0 MHz
Connector	BNC

SDI Input

Number of inputs	1
Systems	PAL, NTSC
Impedance	75 Ohms unbalanced
Input level	800 mVpp nominal
Return loss	> 18 dB, 5 to 270 MHz
Connector	BNC
Jitter acceptance	> 25% of a clock-period
Bit rate	270 Mbit/s +/- 2.5 %

Audio

Inputs	analog, AES / EBU, embedded
Connector	XLR (balanced), DB 9 pin
Number of channels	1 stereo / 2 mono channels

Analogue Audio

Impedance	> 25 kOhms balanced
Clipping level	+ 18 dBu
THD + Noise	< 0.05% at 1 kHz with 48 kHz sampling

AES / EBU

Impedance	110 Ohms balanced
Return loss	-
Input level	0.5 to 6.2 V p-p nominal
Sample rate	8, 16, 22.05, 24, 32, 44.1 and 48 kHz

Embedded Audio

Format	SMPTE 272M
Sample frequency	48 kHz
Resolution	20 bit

Audio / Video Processing

Video MPEG-4 / H.264

Encoding control	Adaptive coding parameters and GOP (preanalysis)
Encoding approach	multi slice
Systems	525 / 29.97 Hz and 625 / 25 Hz
Chroma format	4 : 2 : 0
Encoding rate	0.02 to 15 Mbit/s
Modes	CBR, VBR
Scene change detection	yes
Motion estimation accuracy	1/2 pel, 1/4 pel
H resolutions	720 (adjustable in steps of 8)
V resolutions	480 / 576 (adjustable in steps of 8)
ISMA profile	ISMA 1.0, ISMA 2.0

Audio Algorithms

AAC (MPEG-4)	8 – 384 kbps
AAC HEV2	8 – 384 kbps

Video pre-processing

Cropping	yes
Resize	yes
interlaced	yes
de-interlaced	yes
frame rate subsampling	yes
proc amp	yes

Latency

end-to-end	500 ms
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Decoder Resync

Resync time	< 2 s
Resync after reboot	< 20 s

Transport Output

IP TS Output

Number of outputs	1
Type	Eight-pin RJ-45
Ethernet type	100 Base-T
Format	UDP / IP
IP Address format	multicast, unicast
SAP / SDP	yes / yes
TS packet length	188 byte

Monitor / Control

Management interface	Ethernet 10/100 Base-T on RJ-45
Protocol	SNMP, Web or Telnet
Front panel	LCD character display with menu and input keys
Statmux interface	-

Environmental

Operation temperature range	5 to 35 °C (41 to 95° F)
Storage temperature range	- 20 to + 70°C (-4 to 158°F)
Relative humidity	+ 30°C / 86° F 95%
Dimensions (W x H x D)	17.52 x 15.75 x 3.31 inches (445 x 400 x 84 mm)
Weight	16.42 lbs / 7.45 kg
Cooling	Forced cooling with air flow from front to back

Power Requirements

AC Power

Voltage range	100 to 240 V AC
Line frequency	auto ranging
Power consumption	210 W max