

Professional HD Mediaplex

DMP-1903HD



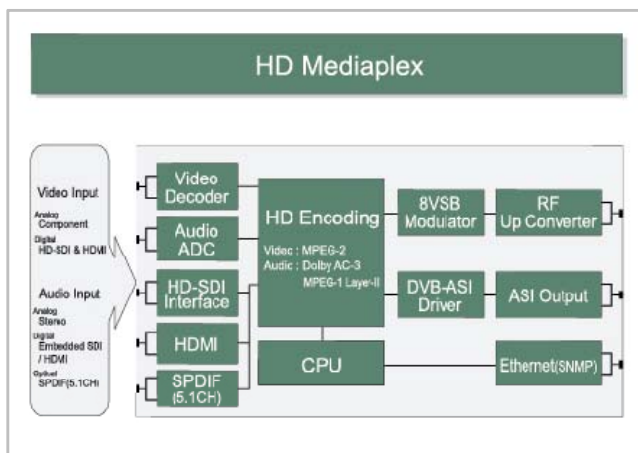
Introduction

Video/Audio 아날로그 신호 및 디지털 입력 신호를 Digital 압축(Compression)/부호화(Encoding) 기술로 처리하여 Digital 신호 전송에 적합한 Transport Stream으로 출력하는 MPEG-2 HD Encoder와 Encoder에서 출력되는 Transport Stream 신호를 DTV방송에 적합한 8-VSB방식으로 변조하여 디지털방송 전송에 적합한 주파수 대역으로 출력하는 8VSB Modulator를 결합한 Professional HD Mediaplex이다.

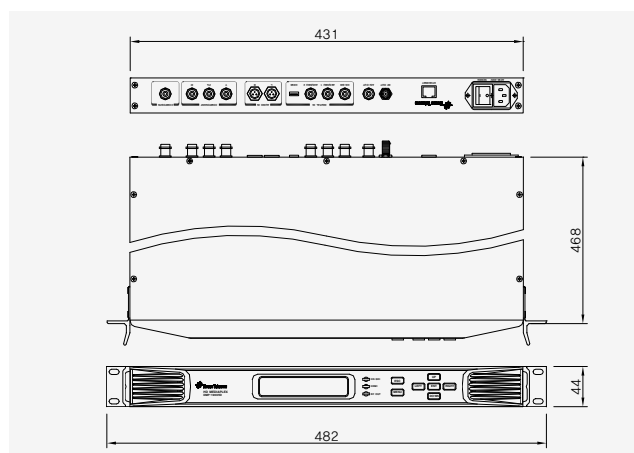
Features

- Component Video Input
- Stereo Analog Audio Input
- HDMI / HD-SDI Digital Input
- Audio 5.1 Channel(SPDIF) Optical Input (Option)
- Professional Audio Encoding
- Dolby Digital® AC-3 & MPEG-1 Layer-II Encoding
- RTOS SOC기반의 Real time processing
- PSI/PSIP Generator
 - MGT, VCT, STT, EIT, PAT, PMT 지원
- Up Converter 내장으로 자유로운 출력 주파수 선택
- QAM Modulator Option 장착가능
- VFD Display에 의한 편리한 Control 기능
 - Input Mode Setting
 - Video/Audio Format Setting
 - Bit Rate Setting
 - Output Frequency / Level Control
- NMS를 위한 Ethernet SNMP기능
- 1RU, 표준형 19" Rack Mount Type

Internal Block Diagram



Drawing



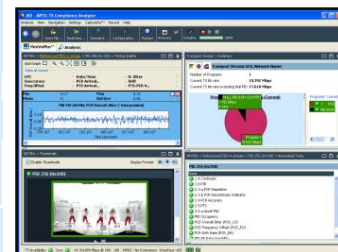
Specifications

DMP-1903HD

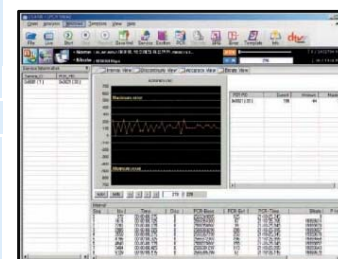
Digital Products

	ITEM	CHARACTER
Video Input	Analog Input	Component
	Video Level	HD 1080i
	1 Vp-p	
	Digital Input	HDMI / HD-SDI
	Level	1000 mVp-p(HDMI) / 800 mVp-p(HD-SDI)
	Impedance	75 Ω
	Aspect Ratio	4:3, 16:9
Audio Input	Analog Input	Stereo
	Frequency Range	20 Hz ~ 20 KHz
	Impedance	600 Ω / 20KΩ
	Connector	Mini XLR
	Digital Input	Embedded SDI / HDMI
	Sampling Rate	32, 44.1 and 48 KHz
	Connector	BNC (75Ω)
	Optical Input	SPDIF(5.1 Channel)
Encoding	Core	SOC(System On Chip) Base
Video Processing	Video Encoding	MPEG-2 MP@HL
	Chroma Format	4:2:0 / 4:2:2 (Option)
	Encoding Rate	5 ~ 70 Mbps
	Latency Time	≤ 800 msec
	Resolutions	1080i x 1920, 1440, 1280, 960 / 720p x 1280, 960
Audio Processing	Audio Encoding	Dolby Digital® AC-3 & MPEG-1 Layer II
	Sampling Rate	32, 44.1 and 48 KHz
	Layer II Encoding Rate	32 ~ 384 Kbps
	Dolby Digital(AC-3) Rate	56 ~ 448 Kbps
TS Output	Transport Stream	DVB-ASI
	Connector	BNC (75Ω)
	TS Rate	5 ~ 70 Mbps
	Packet Format	188 Byte
	Output Level	800 mVp-p (Nominal)
RF Output	Frequency Range	50~870 MHz
	Impedance	75 Ω
	Output Level	55 ± 5 dBmV
	Level Control Range	0 ~ -15 dB
	MER After Equalizer	42 dB
	MER Before Equalizer	37 dB
	Signal to Noise Ratio	≥ 50 dB
	Phase Noise	VHF -105 dB@20KHz, UHF -103 dB@20KHz
	Adjacent Channel Carrier Attenuation Characteristic	≤ -45 dB (Out of band)
	Spurious	≤ -63 dB
	Return Loss	≥ 17 dB
	Frequency Response	± 0.5 dB (5.38MHz)
	Frequency Tolerance	± 2 ppm
	Group Delay	± 20 ns (5.38MHz)
	PCR Jitter	≤ ± 200 ns
Ethernet	Connector	RJ-45
	Interface Type	10/100 Base-T
	Protocols	SNMP
General	Power Requirements	AC 90~230V, 60Hz
	Power Consumption	Max. 80 W
	Weight	3.6 Kg
	Dimensions (W x H x D)	482 x 44 x 468 mm

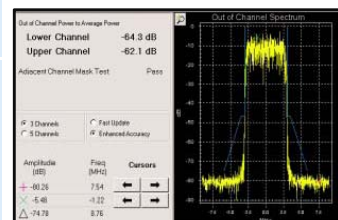
DATA VIEW



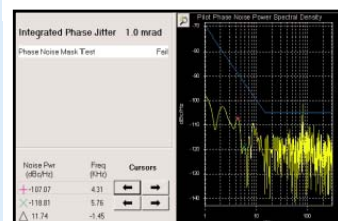
TS Analysis



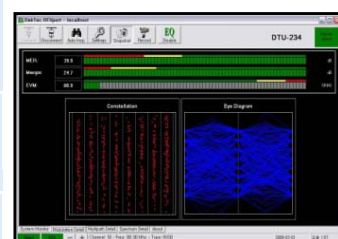
PCR Jitter Analysis



Spectrum Mask



Phase Noise



Signal/Noise & EVM