

DIP3200A Digital IP to Analog Modulator



The Toner DIP3200A is a 32 analog channel modulator for changing IP MPTS or SPTS digital programs to analog NTSC modulated channels. The DIP3200A has two GB ports for content ingest that will convert up to 32 programs to standard NTSC modulated channels. Each port can handle up to 840 Mbps or 64 IP programs. The DIP3200A supports HEVC, H.264, and MPEG2 transport stream decapsulation. Output is 32 programs on adjacent or non-adjacent carriers within a 400 MHz bandwidth between 47 and 862 MHz.



Features

- 47-862 MHz
- Up to 32 Analog Channels
- Dual Gbit Inputs
- HEVC-H.265, H.264, MPEG2
- Standard 6 MHz NTSC Modulated Channels
- Separate Ethernet Management Port
- 52 dBmV RF Output
- 1RU Rackmount

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Input	Interface/Rate	2 GE ports (max 64 IP input) Max 840Mbps for each GE input
	Stream	UDP, UDP / RTP, 1-7 packets, FEC, SPTS, MPTS
	Transport Protocol	UDP/RTP, unicast and multicast, IGMP V2/V3
	Packet Length	188 / 204 Bytes
Decoding Parameters	Video	HEVC/H.265, H.264/AVC Level 4.1 HP, MPEG-2 MP@HL
	Audio	MPEG-1/2 Layer 1/2, (HE-)AAC,AC3
	Resolutions	HEVC/H.265: 1080@60P, 1080@60I, 1080@50P, 1080@50I, 720@60P, 720@50P H.264/AVC: 1080@60I, 1080@50P, 1080@50I, 1080@30P, 1080@25P, 720@60P, 720@50P, 576@50I,480@60I MPEG2: 1080@60I, 1080@50I, 720@60P, 720@50P, 576@50I, 480@60I
	Aspect Ratio	4:3/16:9
Modulation Parameters	Number of Channels	Up to 32 non-adjacent or adjacent carriers output within 400 MHz
	Connectors	75Ω, F-jack
	Frequency Range	47 – 862MHz, digital modulation process (except 10-120 MHz)
	Output Level	maximum 52 dBmV
	Return Loss	≥ 14dB
	Spurious Frequency Dist.	≥ 60dB
	Stereo Cross Talk	> 55dB
	Residual Carrier Accuracy	1%
	TV Standard	NTSC
	Video-Signal to Noise Ratio	≥ 60dB
Network Interface	Management	1 x 100 Base-T Ethernet (RJ 45)
	Data	2 x 1000 Base-T Ethernet (RJ 45)
	Protocol	IEEE802.3 Ethernet, RTP, ARP, IPv4, TCP/UDP, HTTP, IGMPv2/v3
Others	Image Resolution	up to 1080i
	CNR	60 dB (after internal combining)
	SNR	> 53 dB (after internal combining)
	Sampling Frequency	48, 44.1, 32
	Output Volume Adjustment	0 - 100 %
General	Dimensions WxLxH	19" x 17.5" x 1.75
	Temperature	52~113°F
	Power Supply	120-240 VAC 50/60 Hz