



UCrypt® IP to Analog: *

Features:

- ▶ The UCrypt® IP to Analog product offering allows IPTV service providers & MSOs to ingest programs in IP format and retransmit them in NTSC or PAL analog formats
- ▶ Ideal for converting content into analog format to service bulk MDU, hospitality or commercial accounts where legacy TVs are deployed
- ▶ Allows for delivery of up to 20 individually agile analog channels in the 50-750 MHz frequency range
- ▶ Supports ingestion of up to 20 MPEG-2 or H.264, HD or SD, IP multicast video streams in either unencrypted or Verimatrix® encrypted formats
- ▶ Multiple UCrypt devices can be deployed simultaneously to build larger analog lineups and can be located at the customer's premises or deployed at the CO/HE as part of a "centralized" lineup for delivery to customers via RFoG transmitters
- ▶ Features constant program status monitoring and supports SNMP-based alerts & alarms
- ▶ The easy-to-use HTTPS-based management interface allows operators to configure, manage & monitor the UCrypt device remotely

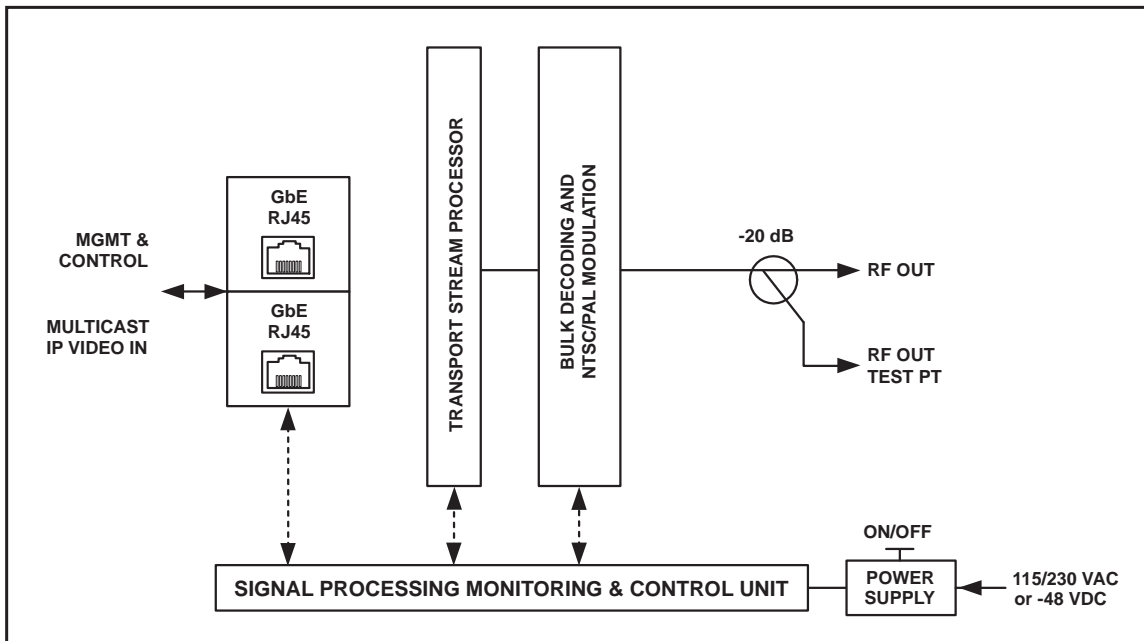
UCrypt® IP to Analog Specifications

SPECIFICATIONS		
INPUT		
ETHERNET	IEEE 802.3-2002,1000BASE-T (GbE)	
CONNECTORS	2x RJ45, Chassis Rear	
TRANSPORT STREAM/LAYER PROTOCOL	SPTS, MPTS over UDP	
MULTICAST PROTOCOL SUPPORT	IPv4 Multicast, IGMP v1, 2	
SUPPORTED VIDEO FORMATS	MPEG-2 MP@HL, MPEG-4 pt10 AVC/H.264 HP@L4	
SUPPORTED VIDEO RESOLUTIONS	Up to 720p & 1080i	
SUPPORTED AUDIO FORMATS	Dolby® Digital (AC-3), MPEG-1 L1/2/3, AAC, AAC (HE)	
REDUNDANCY	Dual input multicasts per program	
TS PROCESSING		
DECODING	Supports Decoding of up to 20 Streams per Chassis	
DECRIPTION	Supports Decryption of up to 20 Verimatrix Encrypted Programs	
ADDITIONAL PROCESSING CAPABILITIES	Closed Captioning, VBI Insertion, Teletext, DVB® Subtitles	
SUPPORTED ASPECT RATIOS	4:3, 16:9	
OUTPUT		
RF	Up to 20 Modulated Channels	
SUPPORTED MODES	NTSC, PAL B/G, PAL D/K	
FREQUENCY RANGE	54-750 MHz (EIA ch2-116) ⁽¹⁾	
FREQUENCY PLANS	STD, HRC, IRC & Custom Offsets	
OUTPUT LEVEL & FLATNESS	35 dBmV +/- 2 dB per Analog Carrier	
SIGNAL-TO-NOISE RATIO (SNR)	54 dB (min)	
CARRIER-TO-NOISE RATIO (CNR)	54 dB (min)	
COMP. TR. BT. (CTB)	-65 dBc	
COMP. 2nd ORD. (CSO)	-65 dBc	
OUTPUT RETURN LOSS	18 dB (min)	
VIDEO CARRIER FREQUENCY STABILITY	± 3ppm	
AUDIO CARRIER FREQUENCY STABILITY	± 5ppm	
DEMODULATED VIDEO	DIFFERENTIAL GAIN	≤ 5%
	GROUP DELAY VARIATIONS	≤ 100nS
	2TK FACTOR	≤ 2%
OUTPUT VIDEO ASPECT RATIOS	4:3, 16:9	
AUDIO OUTPUT FORMAT	Mono	
CONNECTOR	F Connector, Chassis Rear	
RF OUTPUT TEST	-20 dB Relative to Output, F Connector, Chassis Rear	
DEVICE MANAGEMENT		
MANAGEMENT INTERFACE	Local or Remote Management via Integrated Secure Web Server or Central Management Server	
MANAGEMENT INTERFACE PORT	1000BASE-T(GbE), Static IP or DHCP, RJ45, Chassis Rear	
MANAGEMENT SECURITY	3 Password Protected Tiered User Accounts	
MASS DEPLOYMENT & BACKUP	Importable/Exportable Device Configuration Files	
REMOTE MONITORING	Integrated SNMP Agent & MIB	
ALARMS	SNMP Traps, GUI LED Indication	
EAS		
EAS SUPPORT	Supports Processing IP Multicast-based SCTE 18 Standard Messages	
PHYSICAL & ENVIRONMENTAL		
FORM FACTOR	3RU, 19" Rack Mount	
DIMENSIONS	5.25"H x 19.0"W x 22.8"D (13.34H x 48.26W x 57.91D cm)	
WEIGHT (Max)	52.0 lbs (23.6 kg)	
POWERING	Redundant 110/220 VAC or -48 VDC Options, 400W (max)	
SAFETY APPROVALS	cULus & FCC Title 47 Part 15 (class A)	
POWER CONTROL	Rear Panel ON/OFF Switch & Software-based Power Control	
OPERATING TEMPERATURE	0°C to +40°C ⁽²⁾ (+32°F to +104°F)	
HUMIDITY	0-95% Non-condensing	
NOTES:		
(1) Supports output frequencies up to 750 MHz, however specs above may only apply up to 650 MHz.		
(2) For details on exceeding +30°C, please refer to the UCrypt Environment & Temperature Considerations Info Sheet at: www.atxnetworks.com/support/digital-video-products-support/ucrypt-ip-to-analog/		
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Specifications subject to change without notice.

UCrypt[®] IP to Analog:

Functional Schematic



Ordering Information

Part Number	Description
IP to Analog	
UCIPA20N	20-channel IP Input (w/ optional Verimatrix decryption) and NTSC Analog Output (AC power)
UCIPA20N-DC	20-channel IP Input (w/ optional Verimatrix decryption) and NTSC Analog Output (DC power)
UCIPA20BG	20-channel IP Input (w/ optional Verimatrix decryption) and PAL B/G Analog Output (AC power)
UCIPA20BG-DC	20-channel IP Input (w/ optional Verimatrix decryption) and PAL B/G Analog Output (DC power)
UCIPA20DK	20-channel IP Input (w/ optional Verimatrix decryption) and PAL D/K Analog Output (AC power)
UCIPA20DK-DC	20-channel IP Input (w/ optional Verimatrix decryption) and PAL D/K Analog Output (DC power)



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