



MDU Solutions[®] UCrypt[®] Q2A

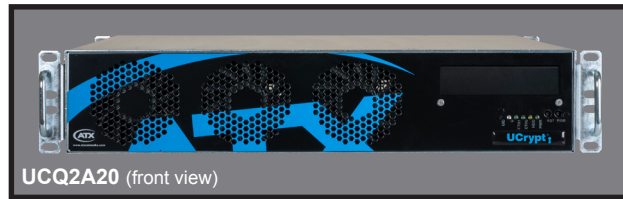
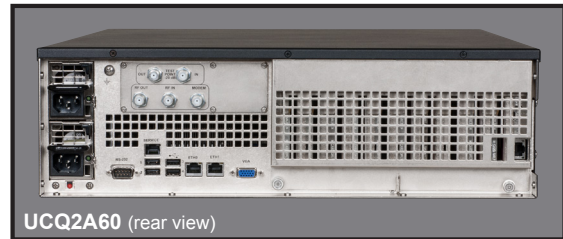
Patent Pending



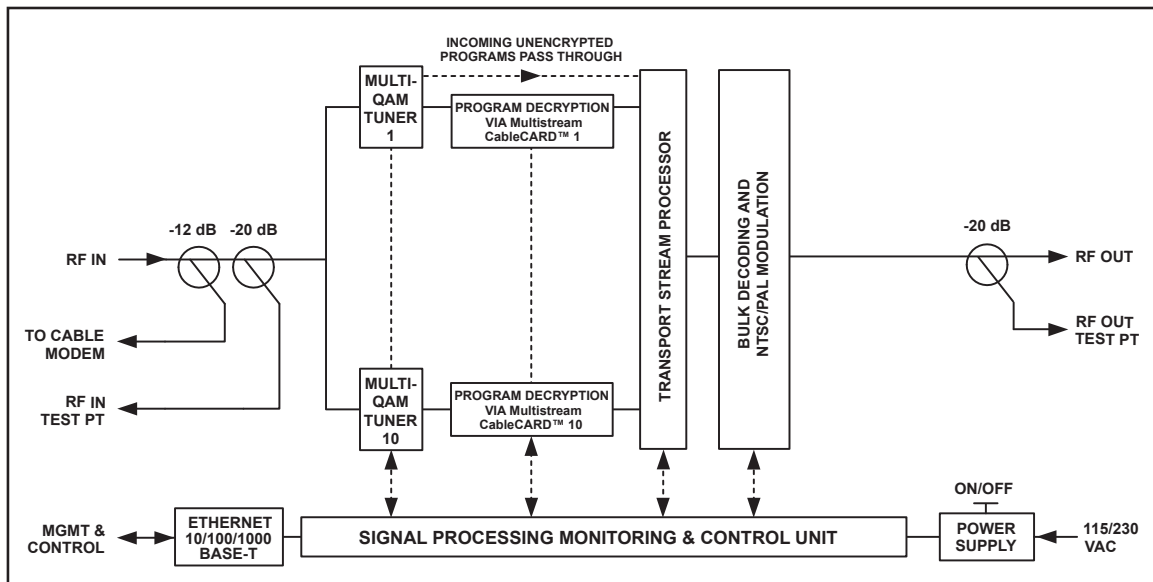
UCrypt[®] QAM to Analog: *

Features:

- ▶ The UCrypt[®] QAM to Analog product offering allows MSOs to decrypt select programs from their digital tier, and retransmit them in NTSC or PAL analog formats
- ▶ Future proof and field-upgradeable to digital QAM output
- ▶ 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 60 individually agile analog channels in the 50-750 MHz frequency range
- ▶ Supports ingestion of up to 60 MPEG-2 or H.264, HD or SD streams
- ▶ Support for SDV channels
- ▶ Includes configurable scrolling program guide channel



Functional Schematic



UCrypt[®] QAM to Analog:

UCrypt[®] QAM to Analog Specifications

SPECIFICATIONS	UCQ2A60	UCQ2A20
INPUT		
RF QAM	Up to 60 64 QAM & 256 QAM Tuners ⁽¹⁾	Up to 20 64 QAM & 256 QAM Tuners ⁽¹⁾
RF QPSK	Complies with ANSI/SCTE 55-1&2 2.048 Mbps & 1.544/3.088 Mbps, ANSI/SCTE 40	
CONNECTOR	F Connector; Chassis Rear	
FREQUENCY RANGE	54 MHz - 1 GHz in 1 kHz Steps, Supporting STD, IRC, HRC	
ADJACENT QAM CHANNEL REQUIREMENT	None; All Tuners Individually Agile	
RF INPUT	+5 to +10 dBmV per Digital Carrier	
RF INPUT TEST	-20 dB Relative to Input; F Connector, Chassis Rear	
TS PROCESSING		
PASSED CONTENT	Decrypt up to 60 Programs ⁽¹⁾ Using up to 10 Multistream CableCARD™ Devices Remaining Unencrypted Content can be Transferred to the Device Output	Decrypt up to 20 Programs ⁽¹⁾ Using up to 4 Multistream CableCARD Devices Remaining Unencrypted Content can be Transferred to the Device Output
CABLECARD DECRYPTION	Supports Motorola, Scientific Atlanta/Cisco, & NDS	
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	
DECODING	Supports Decoding of up to 60 Streams per Chassis	Supports Decoding of up to 20 Streams per Chassis
ADDITIONAL PROCESSING CAPABILITIES	Closed Captioning, VBI Insertion, Teletext, DVB* Subtitles	
SUPPORTED ASPECT RATIOS	4:3, 16:9	
OUTPUT		
RF	Up to 60 Modulated Channels	Up to 20 Modulated Channels
SUPPORTED MODES	NTSC, PAL B/G, PAL D/K	
FREQUENCY RANGE	54-750 MHz (EIA ch2-116) ⁽²⁾	
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)	
DEMODULATED VIDEO	DIFFERENTIAL GAIN	≤ 5%
	GROUP DELAY VARIATIONS	≤ 100nS
	2TK FACTOR	≤ 2%
OUTPUT VIDEO ASPECT RATIOS	4:3, 16:9	
ANALOG 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	
MANAGEMENT INTERFACE PORT	10/100/1000BASE-T, Static IP or DHCP, RJ45, Chassis Rear	
SECONDARY CRAFT PORT	10/100/1000BASE-T, Static IP, 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	
REMOTE MANAGEMENT SUPPORT	F Connector Provided for Optional MSO Supplied Cable Modem Installation for Remote Management	
ALARMS	Email Notification, SNMP Traps	
EAS		
MODES	Support for ANSI/SCTE 18 Compliant & Non-compliant Devices	
PHYSICAL & ENVIRONMENTAL		
FORM FACTOR	3RU, 19" Rack Mount	2RU, 19" Rack Mount
DIMENSIONS	5.25"H x 19.0"W x 23.96"D (13.34H x 48.26W x 60.85D cm)	3.5"H x 19.0"W x 17.8"D (8.89H x 48.26W x 45.11D cm)
WEIGHT	45.0 lbs (20.4 kg)	26.9 lbs (12.2 kg)
INPUT POWER	5.0 Amps @ 115 VAC, 2.5 Amps @ 230 VAC	2.0 Amps @ 115 VAC, 1.0 Amps @ 230 VAC
POWER REDUNDANCY	Fully Redundant 520W Power Supply Modules, Hot-swappable	Single, Non-redundant 700W Power Supply
ELECTRICAL APPROVAL	Approved to UL 60950-1, 2nd Edition (File E325862)	
POWER CONTROL	Software Power Control	
OPERATING TEMPERATURE	0°C to +40°C ⁽³⁾ (+32°F to +104°F)	
HUMIDITY	0-95% Non-condensing	
NOTES:		
(1) Depends upon ordered hardware options.		
(2) Supports output frequencies up to 750 MHz, however specs above may only apply up to 650 MHz.		
(3) For details on exceeding +30°C, please refer to the UCrypt Environment & Temperature Considerations Info Sheet (#ANW1066).		
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UCrypt[®] QAM to Analog:

Ordering Information

Part Number	Description
QAM to ANALOG	
UCQ2A60	UC Q2A 60 Tuner/Decrypt and Analog Output (AC power)
UCQ2A20	UC Q2A 20 Tuner/Decrypt and Analog Output (AC power)

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Specifications subject to change without notice.

