



MDU Solutions[®] UCrypt[®] Q2Qv2

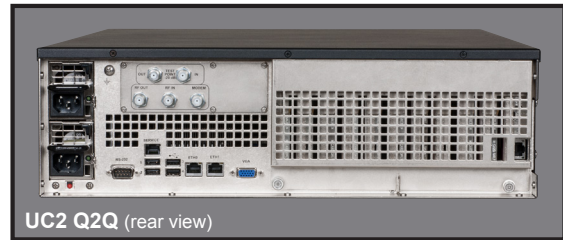
Patent Pending



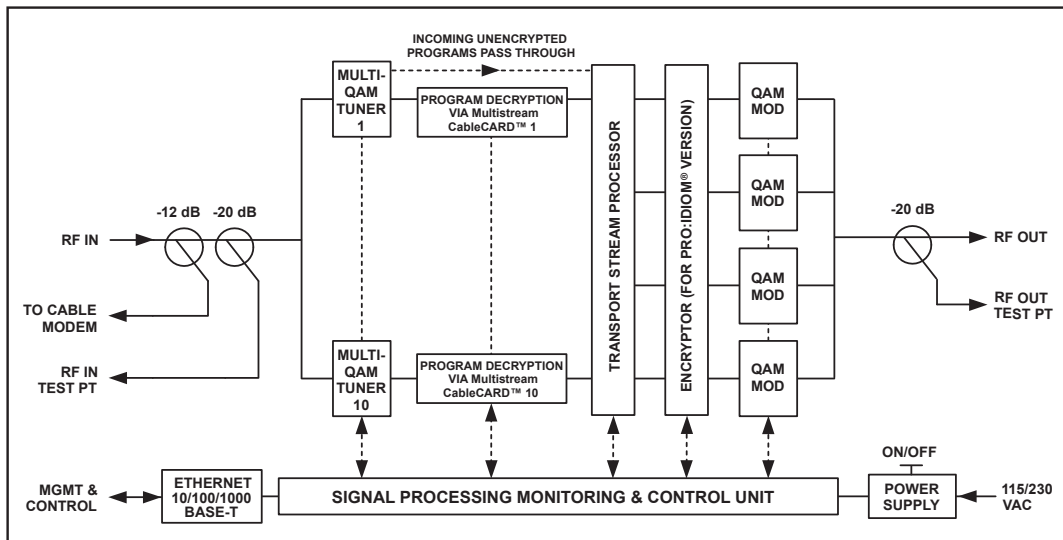
UCrypt[®] QAM to QAM v2 with Pro:Idiom[®] Encryption: *

Features:

- ▶ The UCrypt[®] QAM to QAM product offering allows MSOs to decrypt select programs from their digital tier, re-encrypt them with Pro:Idiom[®] or leave them in-the-clear & retransmit them via QAM 64 or 256
- ▶ Ideal for providing a full complement of reclaimed analog channels in digital SD as well as providing additional HD channels to any hospitality or bulk MDU accounts affected by analog tier migration initiatives
- ▶ Support for H.264 streams
- ▶ Includes configurable line card style EPG channel
- ▶ Allows for PSIP VCT insertion for customizing virtual channel lineup on property TVs
- ▶ Features a true field-upgradeable design to easily add channel capacity on an as-required basis as well as easily replaceable redundant power supply modules
- ▶ HTTPS-based management interface allows operators to monitor, manage & configure the product remotely



Functional Schematic



UCrypt® QAM to QAM v2 with Pro:Idiom® Encryption:

UCrypt® QAM to QAM v2 Specifications

SPECIFICATIONS	
INPUT	
RF QAM	Up to 60 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
CABLECARD DECRYPTION	Supports Motorola, Scientific Atlanta/Cisco, & NDS
MULTIPLEXING CAPACITY	Flexible Creation of up to 32 SPTS and/or MPTS ⁽¹⁾ (38.8 Mbps max each) with PAT/PMT Generation per TS
ENCRYPTION	Pro:Idiom Encrypted Multiplex or Unencrypted Multiplex
ENCRYPTION CAPACITY	Up to 32 SPTS and/or MPTS Multiplexes ⁽¹⁾ (38.8 Mbps max each)
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
CLOSED CAPTION (CC)	Pass through original EIA 608/708 Closed Captioning
OUTPUT	
RF	Up to 32 64 QAM & 256 QAM Channels ⁽¹⁾ in Groups of 4 Adjacent QAMs
FREQUENCY RANGE	54 MHz - 1 GHz in 1 kHz Steps, Supporting STD, IRC, HRC
LEVEL	38 dBmV +/- 2 dB per Digital Carrier
MER	> 40 dB
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
DIMENSIONS	5.25"H x 19.0"W x 23.96"D (13.34H x 48.26W x 60.86D cm)
WEIGHT (Max)	50.2 lbs (22.8 kg)
INPUT POWER	4.0 Amps @ 115 VAC, 2.0 Amps @ 230 VAC
POWER REDUNDANCY	Fully Redundant 520W Power Supply Modules, Hot-swappable
ELECTRICAL APPROVAL	Approved to UL 60950-1, 2nd Edition (File E325862)
POWER CONTROL	Software Power Control
OPERATING TEMPERATURE	0°C to +40°C ⁽²⁾ (+32°F to +104°F)
HUMIDITY	0-95% Non-condensing
NOTES:	
(1) Depends upon ordered hardware options.	
(2) For details on exceeding +30°C, please refer to the UCrypt Environment & Temperature Considerations Info Sheet (#ANW1066).	
Dolby is a registered trademark of Dolby Laboratories. Manufactured under license from Dolby Laboratories.	

UCrypt[®] QAM to QAM v2 with Pro:Idiom[®] Encryption:

Ordering Information

Part Number	Description
UC 2.0 Q2Q with PRO:IDIOM Output	
UCT*/8P	UC2 Q2Q * Tuner/Decrypt 8 QAM Pro:Idiom Out (* = Number of Tuners, ie. 6, 12,18, 24, 30, 36, 42, 48, 54 or 60)
UCT*/16P	UC2 Q2Q * Tuner/Decrypt 16 QAM Pro:Idiom Out (* = Number of Tuners, ie. 12,18, 24, 30, 36, 42, 48, 54 or 60)
UCT*/24P	UC2 Q2Q * Tuner/Decrypt 24 QAM Pro:Idiom Out (* = Number of Tuners, ie. 18, 24, 30, 36, 42, 48, 54 or 60)
UCT*/32P	UC2 Q2Q * Tuner/Decrypt 32 QAM Pro:Idiom Out (* = Number of Tuners, ie. 36, 42, 48, 54 or 60)
UC 2.0 Q2Q with CLEAR Output	
UCT*/8	UC2 Q2Q * Tuner/Decrypt 8 QAM Clear Out (* = Number of Tuners, ie. 6, 12,18, 24, 30, 36, 42, 48, 54 or 60)
UCT*/16	UC2 Q2Q * Tuner/Decrypt 16 QAM Clear Out (* = Number of Tuners, ie. 12,18, 24, 30, 36, 42, 48, 54 or 60)
UCT*/24	UC2 Q2Q * Tuner/Decrypt 24 QAM Clear Out (* = Number of Tuners, ie. 18, 24, 30, 36, 42, 48, 54 or 60)
UCT*/32	UC2 Q2Q * Tuner/Decrypt 32 QAM Clear Out (* = Number of Tuners, ie. 36, 42, 48, 54 or 60)

* Any use of the UCrypt product, directly or indirectly, for the decryption and unauthorized reproduction of content that constitutes or may constitute copyright infringement or otherwise infringes on the proprietary rights of any third party is expressly prohibited. No user of UCrypt shall use UCrypt for any purpose or in any manner which, directly or indirectly, violates the law, violates the proprietary rights of any other party, or aids in any unlawful act or undertaking including, without limitation, laws governing data privacy, international data transmission, and export of technology or data. Any multiple systems operator or other similar party ("MSO") will use the UCrypt product in strict compliance with all applicable laws and in compliance with any agreement in effect between the MSO and a content provider. In no event shall ATX Networks Corp. or any of its affiliates be liable to an MSO, any end user of the UCrypt product, or any other third party, for any claims arising out of or related to any use or misuse of the UCrypt product in contravention of this disclaimer. It is the express obligation of an MSO to convey this disclaimer to any other end user of the UCrypt product.

MDU Solutions[®] and UCrypt[®] are registered trademarks of ATX in the United States and/or other countries. Products or features contained herein may be covered by one or more U.S. or foreign patents. Pro:Idiom[®], Dolby[®], CableCARD[™] and other non-ATX product and company names mentioned in this data sheet are the property of their respective companies.



Specifications subject to change without notice.

