MDU Solutions®

UCrypt® Q2Qv2

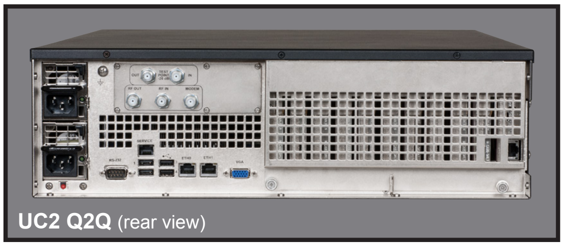
Patent Pending

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

Features:

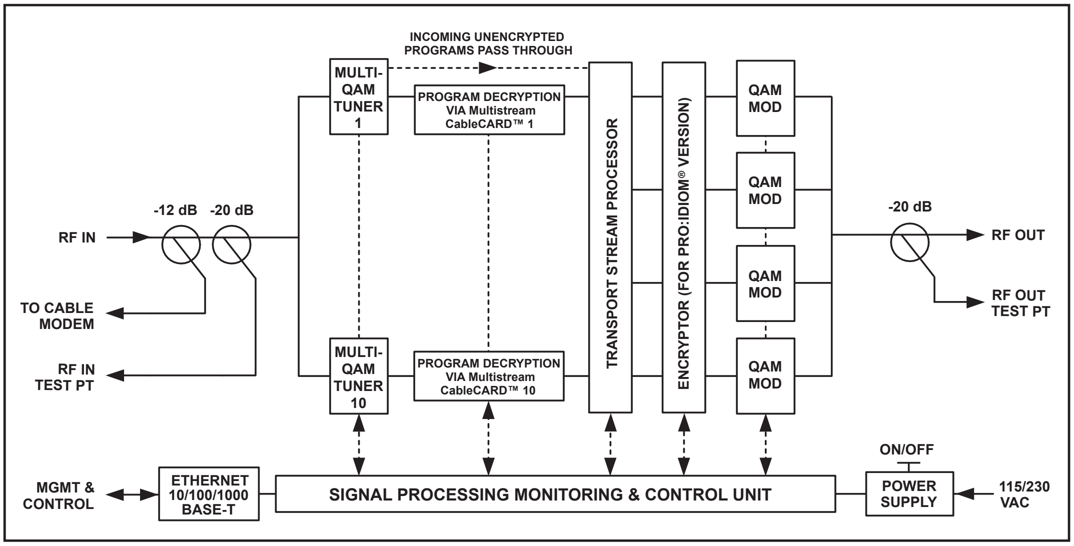
- The UCrypt® QAM to QAM product offering allows MSOs to decrypt select programs from their digital tier, re-encrypt them with Pro:Idiom® or leave them in-the-clear & retransmit them via QAM 64 or 256
- Ideal for providing a full complement of reclaimed analog channels in digital SD as well as providing 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

UC2 Q2Q (front view)



UC2 Q2Q (rear view)

Functional Schematic


INCOMING UNENCRYPTED PROGRAMS PASS THROUGH
MULTI-QAM TUNER 1
PROGRAM DECRYPTION VIA Multistream CableCARD™ 1
MULTI-QAM TUNER 10
PROGRAM DECRYPTION VIA Multistream CableCARD™ 10
TRANSPORT STREAM PROCESSOR
ENCRYPTOR (FOR PRO:IDIOM® VERSION)
QAM MOD
QAM MOD
QAM MOD
QAM MOD
-12 dB
-20 dB
RF IN
TO CABLE MODEM
RF IN TEST PT
-20 dB
RF OUT
RF OUT TEST PT
MGMT & CONTROL
ETHERNET 10/100/1000 BASE-T
SIGNAL PROCESSING MONITORING & CONTROL UNIT
ON/OFF
POWER SUPPLY
115/230 VAC

Specifications subject to change without notice.

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
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	0ºC to +50ºC (+32ºF to +122ºF)
HUMIDITY	0-95% Non-condensing

NOTES:

(1) Depends upon ordered hardware options.

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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)

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ISO
9001
REGISTERED