



# MDU Solutions<sup>®</sup> UCrypt<sup>®</sup> Q2Qv2

Patent Pending



## UCrypt<sup>®</sup> Bulk QAM to QAM v2 with Pro:Idiom<sup>®</sup> Encryption: + \$

### Features:

- ▶ The UCrypt<sup>®</sup> QAM to QAM product offering allows MSOs to decrypt select programs from their digital tier, re-encrypt them with Pro:Idiom<sup>®</sup> or leave them in-the-clear & re-transmit 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
- ▶ 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
- ▶ Enhanced feature set includes custom EPG generation & PSIP VCT value control
- ▶ HTTPS-based management interface allows operators to monitor, manage & configure the product remotely
- ▶ Powered by Ceton technology

### UCrypt<sup>®</sup> Bulk QAM to QAM v2 Specifications

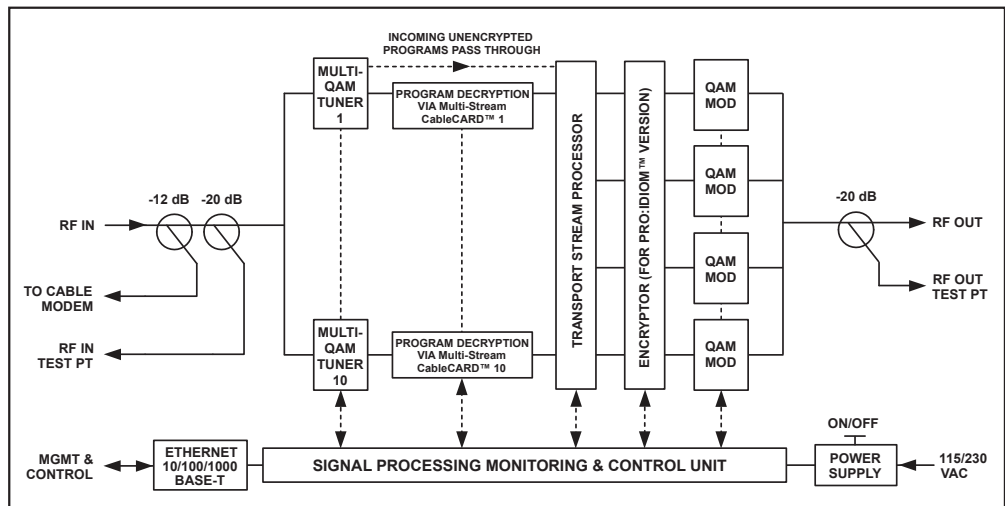
| SPECIFICATIONS   |   |
|--|---|
| <b>INPUT</b>   |   |
| RF QAM   | Up to 60 64 QAM & 256 QAM Tuners <sup>(1)</sup>   |
| RF QPSK  | Complies with ANSI/SCTE 55-1&2 2,048 Mbps & 1,544/3,088 Mbps, ANSI/SCTE 40  |
| CONNECTOR  | F Connector; Chassis Rear   |
| FREQUENCY RANGE  | 54 MHz - 1 GHz in 1 kHz 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   |
| <b>TS PROCESSING</b>                                       |   |
| PASSED CONTENT   | Decrypt up to 60 Programs <sup>(1)</sup> Using up to 10 Multistream CableCARD™ Devices<br>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 <sup>(1)</sup> (38.8 Mbps max each)<br>with PAT/PMT Generation per TS  |
| ENCRYPTION   | Pro:Idiom Encrypted Multiplex or Unencrypted Multiplex  |
| ENCRYPTION CAPACITY  | Up to 32 SPTS and/or MPTS Multiplexes <sup>(1)</sup> (38.8 Mbps max each)   |
| <b>OUTPUT</b>  |   |
| RF   | Up to 32 64 QAM & 256 QAM Channels <sup>(1)</sup><br>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  |
| <b>DEVICE MANAGEMENT</b>                                   |   |
| 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<br>Cable Modem Installation for Remote Management  |
| ALARMS   | Email Notification, SNMP Traps  |
| <b>EAS</b>   |   |
| MODES  | Support for ANSI/SCTE 18 Compliant & Non-Compliant Devices  |
| <b>PHYSICAL &amp; ENVIRONMENTAL</b>                        |   |
| MECHANICAL   | 3RU, 19" Rack Mount: 5.25"H x 19.0"W x 23.96"D (13.34H x 48.26W x 60.86D cm)  |
| INPUT POWER  | 4.0 Amps @ 115 VAC, 2.0 Amps @ 230 VAC, Voltage Selectable  |
| 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 +50°C (+32°F to +122°F)  |
| HUMIDITY   | 0-95% Non-condensing  |
| <b>NOTE:</b><br>(1) Depends upon ordered hardware options. |   |

+ Pro:Idiom and Ceton are the property of their respective owners in the United States and/or other countries.



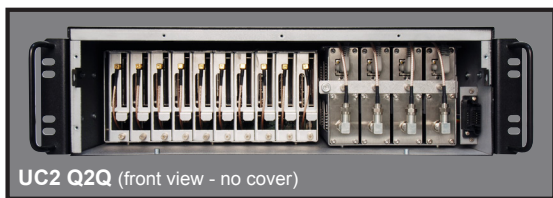
## UCrypt<sup>®</sup> Bulk QAM to QAM v2 with Pro:Idiom<sup>®</sup> Encryption:

### Functional Schematic



### Ordering Information

| Part Number                             | Description  |
|---|--|
| <b>UC 2.0 Q2Q with PRO:IDIOM Output</b> |  |
| 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)                  |
| <b>UC 2.0 Q2Q with CLEAR Output</b>     |  |
| 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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