



MDU Solutions®

UCrypt® Q2Q

Patent Pending



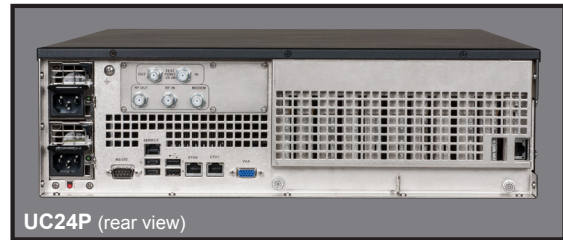
UCrypt® QAM to QAM with Pro:Idiom® Encryption: *

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 hospitality applications where Pro:Idiom encryption is required or for bulk MDU accounts where “clear-QAM” content is desired rather than having to deploy set-tops in every dwelling
- ▶ 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
- ▶ Includes an easy-to-use management interface which allows users to select programs to be decrypted &/or passed through to the output of the device as well as assign them to output QAMs at any frequency
- ▶ Product configuration can easily be saved & uploaded to other products so that mass deployment can be done in a reliable & efficient manner
- ▶ The HTTP-based management interface allows operators to monitor, manage & configure the product remotely
- ▶ Features design enhancements to facilitate field upgrade of tuner & QAM modules for easy & cost-effective future channel capacity expansion

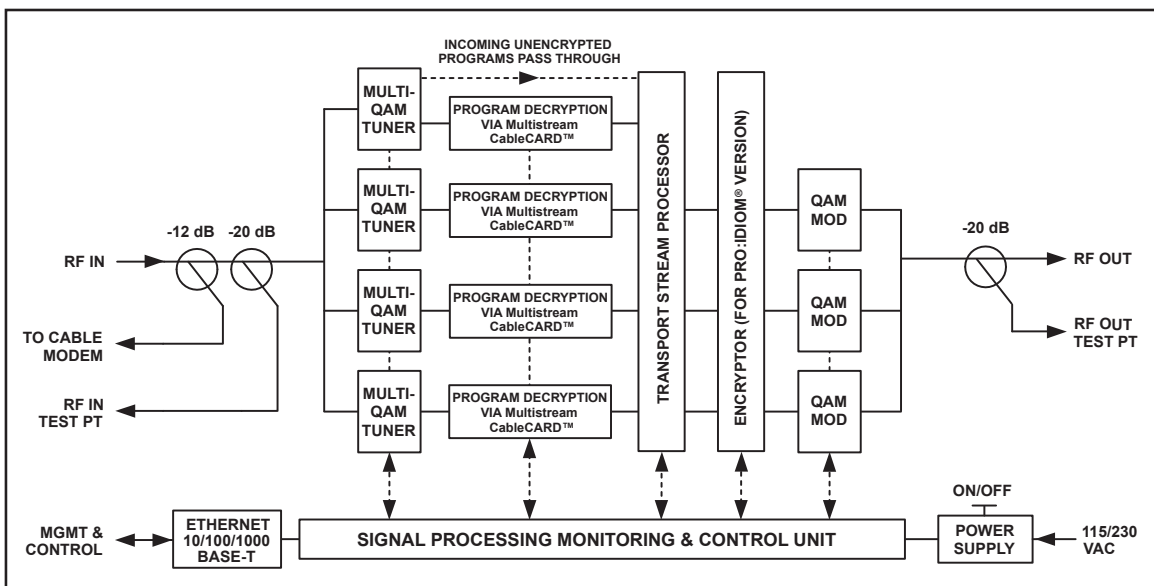


UC24P (front view)



UC24P (rear view)

Functional Schematic



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

UCrypt® QAM to QAM Specifications

| SPECIFICATIONS | |
|--|--|
| INPUT | |
| RF QAM | Up to 24 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 24 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 |
| MULTIPLEXING CAPACITY | Flexible Creation of up to 24 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 24 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 24 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 22.8"D (13.34H x 48.26W x 57.91D cm) |
| WEIGHT (Max) | 46.4 lbs (21.1 kg) |
| POWERING | 2.5 Amps @ 115 VAC, 1.2 Amps @ 230 VAC 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 with Pro:Idiom® Encryption:

Ordering Information

| Part Number | Description |
|--|--|
| QAM to PRO:IDIOM QAM | |
| UC24P | 24 Program Bulk Decrypt, Pro:Idiom Re-encrypt (24 Tuners & 24 Output QAMs) |
| UC24/16P | 24 Program Bulk Decrypt, Pro:Idiom Re-encrypt (24 Tuners & 16 Output QAMs) |
| UC24/8P | 24 Program Bulk Decrypt, Pro:Idiom Re-encrypt (24 Tuners & 8 Output QAMs) |
| UC18P | 18 Program Bulk Decrypt, Pro:Idiom Re-encrypt (18 Tuners & 24 Output QAMs) |
| UC18/16P | 18 Program Bulk Decrypt, Pro:Idiom Re-encrypt (18 Tuners & 16 Output QAMs) |
| UC18/8P | 18 Program Bulk Decrypt, Pro:Idiom Re-encrypt (18 Tuners & 8 Output QAMs) |
| UC12P | 12 Program Bulk Decrypt, Pro:Idiom Re-encrypt (12 Tuners & 16 Output QAMs) |
| UC12/8P | 12 Program Bulk Decrypt, Pro:Idiom Re-encrypt (12 Tuners & 8 Output QAMs) |
| UC6P | 6 Program Bulk Decrypt, Pro:Idiom Re-encrypt (6 Tuners & 8 Output QAMs) |
| QAM to CLEAR QAM | |
| UC24 | 24 Program Bulk Decrypt, Clear QAM Out (24 Tuners & 24 Output QAMs) |
| UC24/16 | 24 Program Bulk Decrypt, Clear QAM Out (24 Tuners & 16 Output QAMs) |
| UC24/8 | 24 Program Bulk Decrypt, Clear QAM Out (24 Tuners & 8 Output QAMs) |
| UC18 | 18 Program Bulk Decrypt, Clear QAM Out (18 Tuners & 24 Output QAMs) |
| UC18/16 | 18 Program Bulk Decrypt, Clear QAM Out (18 Tuners & 16 Output QAMs) |
| UC18/8 | 18 Program Bulk Decrypt, Clear QAM Out (18 Tuners & 8 Output QAMs) |
| UC12 | 12 Program Bulk Decrypt, Clear QAM Out (12 Tuners & 16 Output QAMs) |
| UC12/8 | 12 Program Bulk Decrypt, Clear QAM Out (12 Tuners & 8 Output QAMs) |
| UC6 | 6 Program Bulk Decrypt, Clear QAM Out (6 Tuners & 8 Output QAMs) |
| UCCM* | CableCARD Module with 6 QAM Tuners and Single OOB Tuner |
| UCQAM* | 8-channel QAM Modulator |
| UCFAN | External Replacement Fan for UCrypt |
| NOTE: * F = unit returned to factory for upgrade; L = unit upgraded on site (requires purchase of UCUPGV - on site visit charge) | |

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Specifications subject to change without notice.

