UCrypt® ⌕ Q2IP

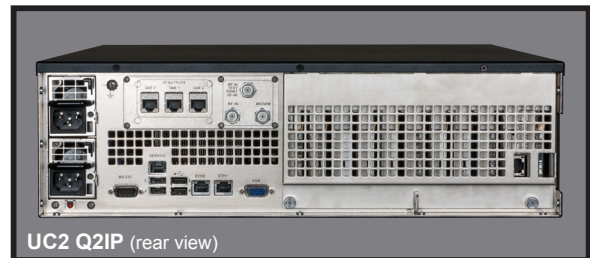## UCrypt® QAM to IP

Features:

▶ The UCrypt® QAM to IP product offering allows MSOs to decrypt select programs from their digital tier, re-encrypt them with Pro:Idiom®, Verimatrix® or leave them in-the-clear & retransmit them over GigE-based IP protocol

▶ Perfect for providing content to commercial or hospitality environments with deployed IPTV systems or for use within other system architectures requiring Pro:Idiom or Verimatrix encrypted content or in-the-clear content in IP format

▶ Supports MPEG-2 & H.264 streams

▶ Configurable multicast IP & port assignments for output streams

▶ Features intelligent "plant following" functionality to ensure output programs are maintained during cable plant program moves

▶ Includes an easy-to-use management interface which allows users to select programs to be decrypted and/or passed through to the output of the device & assign them to desired IP multicast addresses

▶ 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 Q2IP (front view)

UC2 Q2IP (rear view)

Ordering Information

Part Number	Description
UC 2.0 Q2IP with Unencrypted Output	
UCT12QIP	UC2 Q2IP 12 Tuner/Decrypt IP Out
UCT24QIP	UC2 Q2IP 24 Tuner/Decrypt IP Out
UCT48QIP	UC2 Q2IP 48 Tuner/Decrypt IP Out
UCT60QIP	UC2 Q2IP 60 Tuner/Decrypt IP Out
UC 2.0 Q2IP with PRO:IDIOM Output	
UCT12PQIP	UC2 Q2IP 12 Tuner/Decrypt Pro:Idiom Encrypted IP Out
UCT24PQIP	UC2 Q2IP 24 Tuner/Decrypt Pro:Idiom Encrypted IP Out
UCT48PQIP	UC2 Q2IP 48 Tuner/Decrypt Pro:Idiom Encrypted IP Out
UCT60PQIP	UC2 Q2IP 60 Tuner/Decrypt Pro:Idiom Encrypted IP Out
UC 2.0 Q2IP with Verimatrix (Simulcrypt-based) Output	
UCT12SQIP	UC2 Q2IP 12 Tuner/Decrypt Verimatrix (Simulcrypt-based) Encrypted IP Out (SPTS only)
UCT24SQIP	UC2 Q2IP 24 Tuner/Decrypt Verimatrix (Simulcrypt-based) Encrypted IP Out (SPTS only)
UCT48SQIP	UC2 Q2IP 48 Tuner/Decrypt Verimatrix (Simulcrypt-based) Encrypted IP Out (SPTS only)
UCT60SQIP	UC2 Q2IP 60 Tuner/Decrypt Verimatrix (Simulcrypt-based) Encrypted IP Out (SPTS only)
UC 2.0 Q2IP with PRO:IDIOM or Verimatrix (Simulcrypt-based) Output	
UCT12XQIP	UC2 Q2IP 12 Tuner/Decrypt Pro:Idiom or Verimatrix (Simulcrypt-based) Encrypted (SPTS only) IP Out
UCT24XQIP	UC2 Q2IP 24 Tuner/Decrypt Pro:Idiom or Verimatrix (Simulcrypt-based) Encrypted (SPTS only) IP Out
UCT48XQIP	UC2 Q2IP 48 Tuner/Decrypt Pro:Idiom or Verimatrix (Simulcrypt-based) Encrypted (SPTS only) IP Out
UCT60XQIP	UC2 Q2IP 60 Tuner/Decrypt Pro:Idiom or Verimatrix (Simulcrypt-based) Encrypted (SPTS only) IP Out
UC 2.0 Q2IP with MUX Pass Through	
UCT60FMQIP	UC2 Q2IP 60 Tuner MUX Pass Through IP Out
Verimatrix (Simulcrypt-based) Encryption Add-on	
UC-SCR-ADD	Post-sale Verimatrix (Simulcrypt-based) Encryption Functionality License (NOTE: This applies only to UCrypt hardware versions of v3.1 or later)
Power Supply Modules	
UCTPSMOD-AC3	UCrypt AC Power Supply Module 3
UCTPSMOD-DC1	UCrypt DC Power Supply Module 1

UCrypt® QAM to IP Specifications

UCrypt® Q2IP

UCrypt® QAM to IP

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 SPTS and/or MPTS Multiplexes with PAT/PMT Generation per TS
ENCRYPTION[1]	Pro:Idiom, Verimatrix (Simulcrypt-based) or Unencrypted Output Options
ENCRYPTION CAPACITY[3][4]	Up to 60 programs. Pro:Idiom (MPTS or SPTS), Verimatrix (SPTS only)
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
VERIMATRIX MODES	AES-ECB1, AES-ECB2 & AES-CBC1
OUTPUT	
ETHERNET	IEEE 802.3-2002, 1000BASE-T (GbE)
CONNECTORS	3x RJ45; Chassis Rear
PHYSICAL PORT ADDRESS	Static IP Address or DHCP Client Mode per Port
TRANSPORT LAYER PROTOCOL	UDP
TRANSPORT STREAM SUPPORT	MPTS & SPTS
ADDRESSING	IPv4 Multicast & Unicast, Supporting all Valid IP Port Numbers
ENCAPSULATION	188 Bytes per TS Packet / 7 TS Packets per IP Packet
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)	45.9 lbs (20.8 kg)
INPUT POWER	4.0 Amps @ 115 VAC, 2.0 Amps @ 230 VAC
POWER REDUNDANCY	Fully Redundant 650W 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 +40ºC[2] (+32ºF to +104ºF)
HUMIDITY	0-95% Non-condensing

NOTES:
(1) Depends upon ordered hardware options.
(2) For details on exceeding +30ºC, please refer to the UCrypt Environment & Temperature Considerations Info Sheet (#ANW1066).
(3) Specific hardware is required.
(4) User is able to select output encryption type, see ordering information.
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