

MDU Solutions

UCrypt® IP2IP

IP to IP *

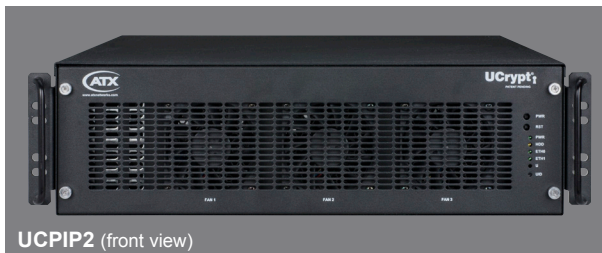


Patent Pending

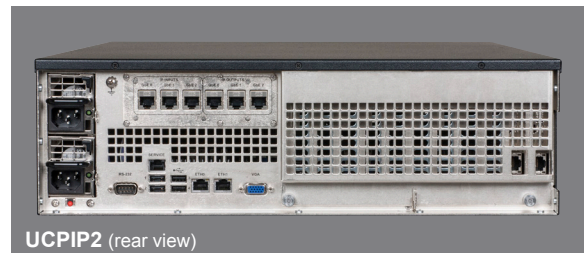
IP to IP
(front view)

Features

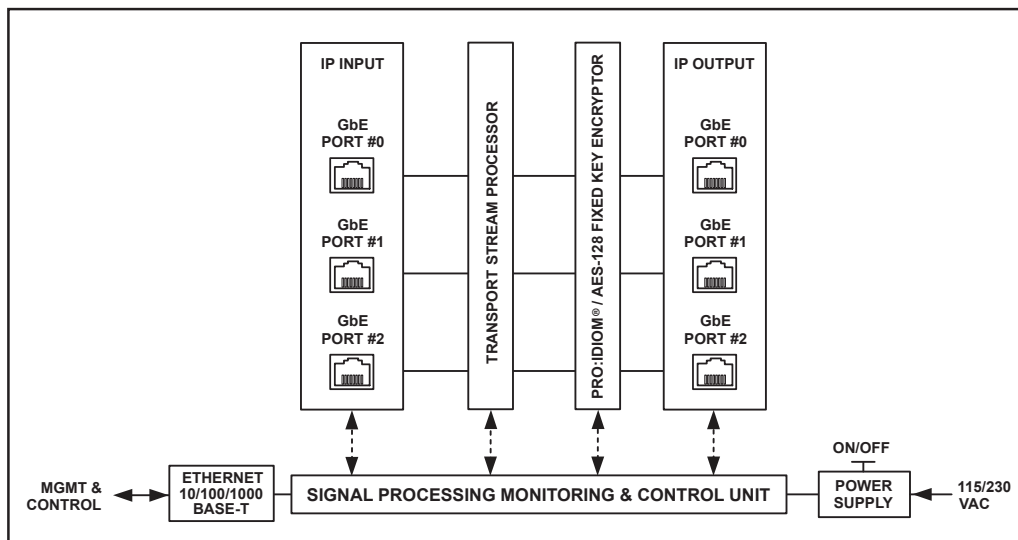
- The UCrypt® IP to IP unit offers MSOs new flexibility to deliver digital content in several protected formats into commercial and hospitality locations and is ideal for applications where the consolidation of Pro:Idiom® or AES-128 Fixed Key encryption at the headend or hub level is desirable
- The UCrypt IP to IP product allows the Cable Service Provider to select programs from their IP network, encrypt them with Pro:Idiom, AES-128 Fixed Key or leave in-the-clear and redistribute the encrypted version of the programs over the network
- Perfect for providing content directly to commercial or hospitality environments with deployed IPTV systems or for use within other system architectures requiring encrypted content in an IP format
- 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 HTTP-based management interface which allows an operator to monitor, manage and configure the product locally or remotely



UCPIP2 (front view)



UCPIP2 (rear view)



Functional Schematic



Specifications IP to IP

INPUT	
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 and SPTS
ADDRESSING	IPv4 Multicast and Unicast, Supporting all Valid IP Port Numbers
MULTICAST SUPPORT	Source Specific Multicast (SSM) and IGMP v1, 2 & 3
ENCAPSULATION	188 Bytes per TS Packet / 7 TS Packets per IP Packet
TS PROCESSING	
DECRYPTION	AES-128 Fixed Key Decryption
DECRYPTION CAPACITY	Up to 1.2 Gbps
ENCRYPTION	Pro:Idiom, AES-128 Fixed Key Encrypted Multiplex or Unencrypted Multiplex
ENCRYPTION CAPACITY	Up to 1.2 Gbps for Pro:Idiom and 1.7 Gbps for AES Fixed Key SPTS and/or MPTS
SUPPORTED VIDEO FORMATS	MPEG-2 MP@HL, MPEG-4 pt10 AVC/H.264 HP@L4
SUPPORTED VIDEO RESOLUTIONS	Up to 720p and 1080i
SUPPORTED AUDIO FORMATS	Dolby® Digital (AC-3), MPEG-1 L1/2
CLOSED CAPTION (CC)	Pass Through Original EIA 608/708 Closed Captioning
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 and SPTS
ADDRESSING	IPv4 Multicast and Unicast, Supporting all Valid IP Port Numbers
MULTICAST SUPPORT	IGMP v1, 2 & 3
ENCAPSULATION	188 Bytes per TS Packet / Seven 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	Three Password Protected Tiered User Accounts
MASS DEPLOYMENT & BACKUP	Importable/Exportable Device Configuration Files
REMOTE MONITORING	Integrated SNMP Agent and MIB
ALARMS	Email Notification, SNMP Traps
EAS	
MODES	Support for ANSI/SCTE 18 Compliant and 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)	39.3 lbs (17.8 kg)
INPUT POWER	AC: 4.0 Amps @ 115 VAC, 2.0 Amps @ 230 VAC DC: 7.5 Amps @ -48 VDC
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	0°C to +40°C ⁽¹⁾ (+32°F to +104°F)
HUMIDITY	0-95% Non-condensing

NOTES:

(1) 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.



Ordering Information

Part Number	Description
IP to IP - CLEAR Output	
UCIP2	IP to IP, 1.2 Gbps MPTS/SPTS, Clear Output
UCIP2DC	IP to IP, 1.2 Gbps MPTS/SPTS, Clear Output (DC)
UCIP2D	IP to IP, 1.2Gbps AES Fixed Key Decrypt, Clear Output
IP to IP - PRO:IDIOM Output	
UCPIP2	IP to IP, 1.2 Gbps MPTS/SPTS, Pro:Idiom Output
UCPIP2D	IP to IP, 1.2Gbps AES Fixed Key Decrypt, Pro:Idiom Output
IP to IP - AES-128 Fixed Key Output	
UCKIP2	IP to IP, 1.7 Gbps MPTS/SPTS, AES 128 Fixed Key Output
Power Supply Modules	
UCTPSMOD-AC3	UCrypt AC Power Supply Module 3
UCTPSMOD-DC1	UCrypt DC Power Supply Module 1

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