

Subscriber Networks

Netcrypt™ Bulk Encryptor

Description

The Netcrypt™ Bulk Encryptor is a powerful, network-attached encryption device designed for broadcast and on-demand applications in systems that use MPEG transport over UDP, IP, and Ethernet.

The Netcrypt Bulk Encryptor has a maximum throughput of four gigabits per second (4 Gbps) in a compact, two rack-unit high chassis. It is capable of encrypting as many as 4,000 input programs into a maximum of 4,000 transport streams suitable for distribution as digital broadcast or as IP multicast sessions.

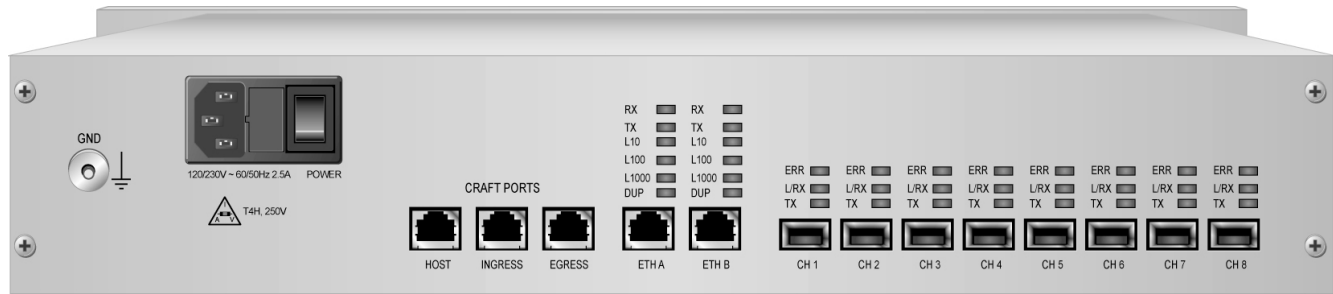
The Netcrypt Bulk Encryptor is designed to be connected to a switch or router network using four Gigabit Ethernet ports in bi-directional mode. In this application, QAM modulator edge devices are connected to ports on the Gigabit Ethernet switch either directly or remotely through network transport equipment. The Netcrypt Bulk Encryptor receives clear data to be encrypted and sends the data to the edge device's Gigabit Ethernet switch for distribution through other ports.



Features

- Ideal for encryption of switched digital video (SDV) streams
- Maximum throughput of 4 Gbps
- Capable of encrypting up to 4,000 input programs into a maximum of 4,000 transport streams suitable for digital broadcast or multicast sessions
- Four Gigabit Ethernet ports for MPEG data (duplex multimode fiber optic cables or copper cables)
- Optimizes system management with provisioning and monitoring by the DNCS
- Five front-panel status indicators provide an at-a-glance status of the unit

Back Panel Connectors



Specifications

Digital I/O Performance	
Maximum Input/Output Rate	4 full Gigabit Ethernet data payload (PowerKEY [®] CA System) Note: These are labeled as PORT 1 to PORT 4 on the back of the Netcrypt Bulk Encryptor. (The ports labeled PORT 5 to PORT 8 are not active.)
Maximum Total Sessions	4,000 (PowerKEY CA System)
Maximum PIDs/Session	16
PAT and PMT processing rate	30 Kbps per program
Core Encryption Modes	PowerKEY CA System Data Encryption Standard (DES) encryption mode Digital Video Broadcasting - Common Scrambling Algorithm (DVB-CSA)
Gigabit Ethernet Input/Output Rate	952 Mbps (per port maximum) Note: These are labeled as ports ETHA and ETHB on the back of the Netcrypt Bulk Encryptor.
Electrical	
Supply Voltage	100–240 VAC 50/60 Hz 2.5A
Line Frequency	47 Hz to 63 Hz
Power Required	300 VA (maximum)
Power Dissipated	275 Watts (maximum)
In Current	35 amps maximum, Vin = 100 VAC 75 amps maximum, Vin = 240 VAC
Mechanical	
Rack Mount Type	EIA RS-310
Dimensions (WxDxH)	19 in. x 22.5 in. x 3.5 in. (482.6 mm x 571.5 mm x 88.9 mm)
Weight	24.5 lb (1.10 kg)
Environmental	
Operating Temperature Range	0°C (32°F) to 50°C (122°F)
Storage Temperature Range	-10°C (14°F) to 70°C (158°F)
Operating Humidity	5% to 95%, non-condensing
Vibration Susceptibility	No data errors with a chassis vibration of 0.5 Gs. No data errors with a vibration frequency of 10 Hz to 400 Hz
Electrostatic Shock Susceptibility	No damage sustained from five discharges of 15 KV IEC electrostatic discharge model (150pF + 150 Ω) to all exposed connections

Netcrypt Bulk Encryptor

Connectors	
Gigabit Ethernet	SFP Module. Modules are available for duplex multimode fiber or copper interface (Four active ports)
10/100/1000BaseT Ethernet	RJ-45 (two)
Craft Port	RS-232 serial port using an RJ-45 jack (three)
AC Power	IEC three wire
Regulatory Compliance	
UL, CUL, and FCC	Certified

Ordering Information

Contact your Sales Representative for product availability in your area.

Netcrypt Bulk Encryptor Chassis

To ensure that output ports are correctly configured on your Netcrypt Bulk Encryptor, order one SFP Module Kit along with each Netcrypt Bulk Encryptor Chassis.

Description	Part Number
Netcrypt Bulk Encryptor Chassis Note: The chassis has eight ports; four of these ports are active and are configured according to the SFP Module Kit ordered with the chassis.	4007553

SFP Module Kit

For each Netcrypt Bulk Encryptor Chassis ordered, select one SFP Module Kit appropriate to your system configuration.

Note: Each kit includes four SFP modules, one for each active output port.

Description	Part Number
SFP Fiber Optic Module Kit for 850 nm wavelength, short reach, duplex LC connector types	1003270
SFP Fiber Optic Module Kit for 1310 nm wavelength, long reach, duplex LC connector types	1003271
SFP Copper Module Kit for 10/100/1000BaseT, RJ-45 connector types	4006222

Spare Parts

Description	Part Number
Replacement fuse (4.0 A, SLO BLO 250 fuse)	188106
Fan replacement kit (includes fan unit and instruction sheet)	4010291-40



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