

BENEFITS

Single Program Transport Stream (SPTS) encryptor for switched digital and VOD solutions

Supports MediaCipher encryption of up to 192 services (unique tier per service), or up to 384 services using Common Tier Encryption (CTE)

Configurable using an embedded element manager or Motorola's SmartStream Device Manager (SDM)

An XML interface allows the Digital Addressable Controller (DAC) to deliver Entitlement Management Messages and conditional access rights data to the NE

Performs periodic insertion of Motorola Entitlement Control Messages

Provides status and alarms using SNMP traps

Configurable control and management of copy control information (CCI) and analog protection system (APS) data



NE1000

Network Encryptor

Motorola's Network Encryptor supports the centralized encryption of MPEG services in a MediaCipher® conditional access system. The NE also provides the ability to support efficient Single Program Transport Stream (SPTS) distribution of services, which is necessary in Switched Digital Video (SDV) applications. Support for centralized encryption in VOD systems can also be supported. The NE supports both full encryption (unique tier per service) and Common Tier Encryption (CTE), where each encrypted service shares the same access requirements. The NE can be configured to follow the input copy control information within an input DTCP descriptor, as well as to follow settings provided by the DAC or made by the operator directly on the NE EM (CTE only).

The NE receives and transmits all MPEG services in the form of MPEG-2 SPTSs using Gigabit Ethernet (GigE). The ability to transmit encrypted SPTSs is necessary in SDV systems to make the most efficient use of available encryption resources. The NE is the first Motorola digital cable headend product specifically designed to fully support the transmission of SPTSs at the output. As a result, the NE is a key required component of all SDV system deployments using Motorola conditional access.

SPECIFICATIONS

INTERFACES

| | |
|------------------------------|---|
| Configuration and Control | Embedded Web interface (Element Manager) or SDM |
| Serial | RS-232 (standard) |
| GigE | |
| Physical Ports | 2 ports; each supports insertion of either optical or electrical SFP |
| Optical GigE | 850 nm, 1310 nm, and 1550 nm wavelengths; IEEE 802.3z full duplex; standard duplex LC™ SFP |
| Electrical GigE | 1000Base-T SFP, IEEE 802.3z full duplex, RJ-45 connector |
| Fast Ethernet (10/100Base-T) | 2 ports; IEEE 802.3u; RJ-45 connector; twisted pair |

ENCRYPTION CAPACITY

| | |
|--------------------------------|---------------------------------------|
| Unique Tier Per Service | 192 services |
| Common Tier Encryption (CTE) | 384 services |
| MPEG-2 Transport Stream Format | SPTS: in and out; MPTS: not supported |

ELECTRICAL (AC POWER)

| | |
|-------------------|---------------------|
| Input Voltage | 100 to 240 VAC |
| VAC Frequency | 50 to 60 Hz |
| Current | 0.6 to 1.6 A, 120 V |
| Power Consumption | 138 W (maximum) |

ELECTRICAL (DC POWER)

| | |
|-------------------|-----------------|
| Input Voltage | -40 to -60 VDC |
| Current | 3.5 A (maximum) |
| Power Consumption | 138 W (maximum) |

ENVIRONMENT

| | |
|---------------------|-----------------|
| Ambient Temperature | 0 °C to 50 °C |
| Ambient Humidity | 5% to 90% |
| Storage Temperature | -40 °C to 70 °C |
| Cooling | 5 fans |

OTHER

| | |
|------------------|--------------------------------|
| Limited Warranty | 1 year |
| Dimensions | 1.75" H x 19" W x 24" L (1 RU) |
| Weight | 13 lb |
| Mounting | Rack mount |

Specifications are subject to change without notice.

| Product Number | Description |
|----------------|-----------------------------------|
| 533992-001-00 | NE - NETWORK ENCRYPTOR - AC POWER |
| 533992-002-00 | NE - NETWORK ENCRYPTOR - DC POWER |



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