NE1000

NETWORK ENCRYPTOR

MOTOROLA

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.

SPECIFICATION SHEET

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

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