

NE2500 Network Encryptor

Video encryption for DCX set-tops



PRODUCT OVERVIEW

The NE2500 Network Encryptor supports centralized encryption and Single Program Transport Stream (SPTS) distribution of services in VOD and SDV (Switched Digital Video) systems.

The basic version of the NE2500 encrypts up to 256 unique Single Program Transport Streams (SPTSs) over its GigE input and output ports.

With an aggregate bandwidth of 931 Mbps, the NE2500 can support encryption services for up to 256 SPTS at 3.63 Mbps each (Standard Definition SPTS).

Physical Chassis

The NE2500 chassis is a standard one RU chassis. It provides two GigE inputs and two GigE outputs. It also provides two, 10/100BaseT Fast Ethernet interfaces for control and management, and for the sending of SNMP traps.

The NE2500 supports up to two hot-swappable load-sharing power supply modules (primary and redundant).

Encryption and Conditional Access

The NE2500 product can encrypt up to 384 MPEG services. It supports full MediaCipher encryption and conditional access. The NE2500 also supports PPV/IPPV services as an option (license required).

NE2500 Redundancy

The NE2500 provides multiple redundancy features. These include input transport stream redundancy, 1:1 device-level chassis redundancy, and a mirror output port to support output stream redundancy.

For input transport stream redundancy the NE2500 can be configured to receive up to 256 primary and 256 backup transport streams.

For 1:1 device-level chassis redundancy the NE2500 can be configured with a 1:1 redundant backup pair. This backup unit, upon failure detection from the primary, will automatically take over all functionality of the failed primary unit.

At the NE2500 output, a primary GigE output is provided as well as a mirror output port. The transport streams in the mirror output port can be configured to use the same source IP address as the streams in the primary output.

NE2500 SET CONFIGURATION PART NUMBERS

Component	Description	Part Number
Configuration 1: NE2500 AC Power	NE2500 with 2 AC power supplies	577992-001-00
Configuration 2: NE2500 DC Power	NE2500 with 2 DC power supplies	577992-002-00
Configuration 3: NE2500 AC Power with PPV / IPPV License	NE2500 with 2 AC power supplies. Includes PPV / IPPV license	577992-005-00
Configuration 4: NE2500 DC Power with PPV / IPPV License	NE2500 with 2 DC power supplies. Includes PPV / IPPV license	577992-006-00

NE2500 SPARE COMPONENT PART NUMBERS

Component	Description	Part Number
PS Module – AC Power	Spare PS Module (AC Power)	540272-001-00
PS Module – DC Power	Spare PS Module (DC Power)	540272-002-00
Fan Module	Spare fan module	546494-001-00

NE2500 LICENSE PART NUMBERS

License	Description	Part Number
NE2500 PPV / IPPV License	Enables the use of the PPV / IPPV feature on the NE2500	577992-003-00

GENERAL SPECIFICATIONS

Modular Chassis

Chassis Height	One RU
Dimensions	1.75 in x 19.0 in x 24.9 in (4.45 cm x 48.26 cm x 63.25 cm)
Weight	19 lbs (8.62 kg)

Power

Power Supplies	Two per chassis
Hot Swappable	Yes
Load Sharing	Yes
Configurations	Two AC, or Two DC
AC Power Supply	100 to 240 VAC, 50/60 Hz
DC Power Supply	-40 to -60 VDC
Power Consumption	30 W typical; 165 W max

Environmental

Operating Temperature	32 °F to 122 °F (0 °C to 50 °C)
Storage Temperature	-40 °F to 158 °F (-40 °C to 70 °C)
Cooling	Three fan only filler modules
Operating Altitude	-200 feet to 10,000 feet AMSL
Operating Humidity	5% to 95%

GENERAL SPECIFICATIONS (CONTINUED)

Gigabit Ethernet Input/Output

GigE MPEG Data	Receive / Transmit
GigE Throughput	Support for full GigE 931 Mbps total throughput from GigE input to GigE output
Physical Ports	Four SFP Slots
IGMPv3	Supported
Optical SFP Support	850, 1310, 15xx nm
Electrical SFP Support	1000Base-T

Gigabit Ethernet Input/Output

Physical Ports	Two RJ-45 Ethernet
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Transport Stream Specifications

Max number of input TS	Up to 512 (256 primary and 256 backup)
Max number of output TS	Up to 256 (BW permitting)
Max number of Multicast Groups	Up to 512 (IGMP v1, v2, and v3 supported)
Transport Stream Rate Handling	The NE2500 does not alter the rate of the stream (Null packets preserved)
CBR/VBR Support	Receive CBR, re-transmit CBR Receive VBR, re-transmit VBR
Encryption Capacity	384 services (BW permitting)
Packet Latency (through the NE2500)	Less than 10 ms. (typically < 2 ms.)
SNMP trap destination addresses	Up to four

All features, functionality, and other product specifications are subject to change without notice or obligation.

CUSTOMER CARE

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