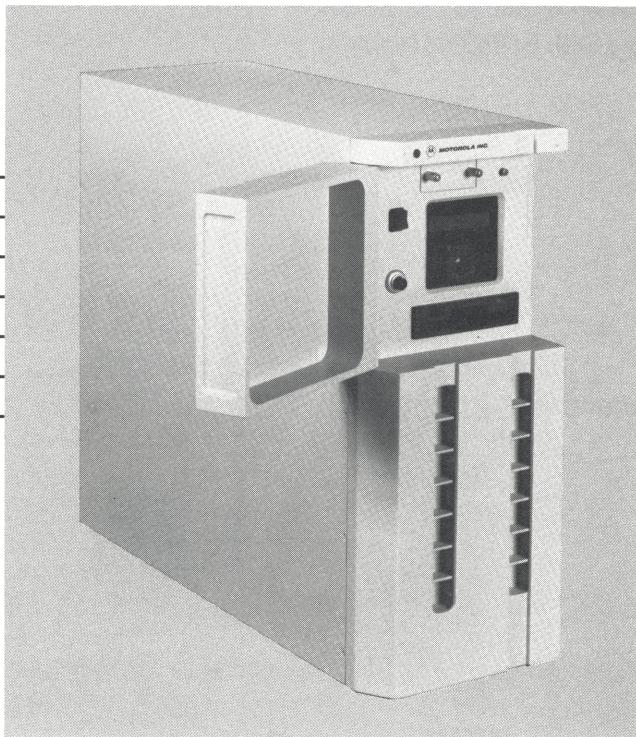




**MOTOROLA INC.**

# **NETWORK ENCRYPTION SYSTEM FOR 802 LAN**



## **DESCRIPTION**

The Network Encryption System (NES) features the latest in security services for protection of local area networks. Designed in accordance with Secure Data Network System (SDNS) standards, the NES is the flexible, interoperable network security solution for U.S. Government departments or agencies' and Government contractors. The NES provides a full complement of security services necessary for network protection: encryption, access control, integrity, authentication, audit, and electronic key management.

The NES is a stand-alone device inserted between a user host, or workstation, and the network. It functions transparently, acting as a network node to the host and as a user device to the network. The NES allows up to 250 simultaneous, protected network connections. Data network compatibility throughout provides optimum performance over interconnected networks.

## **FEATURES**

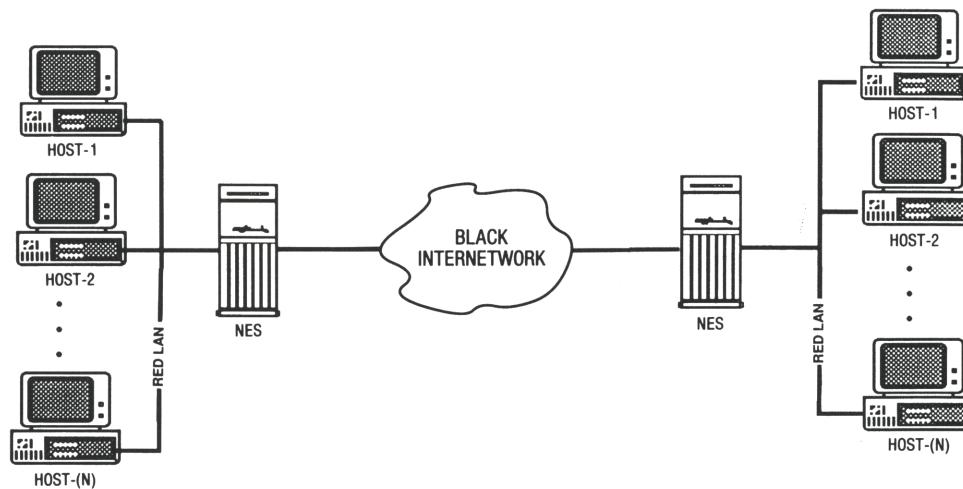
- Designed for protection of data through Top Secret
- Automatic key management capabilities
- Stand-alone or rack-mount models
- Simplified configuration control features
- 250 simultaneous network connections
- Compatible with Local Area Network (LAN) interfaces and protocols
- Supports DoD TCP/IP or ISO OSI protocols

## BENEFITS OF 802 LAN NES

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### LAYER 3 SECURITY

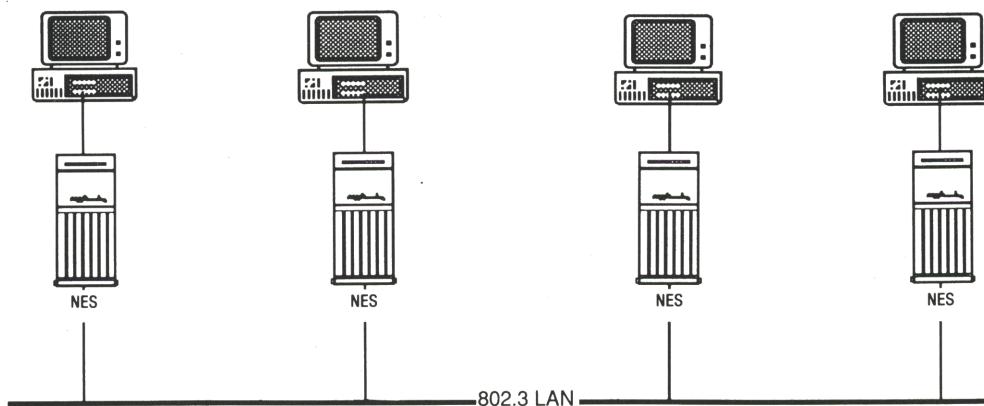
- Supports Red Networks
- Interoperable with SDNS Internet



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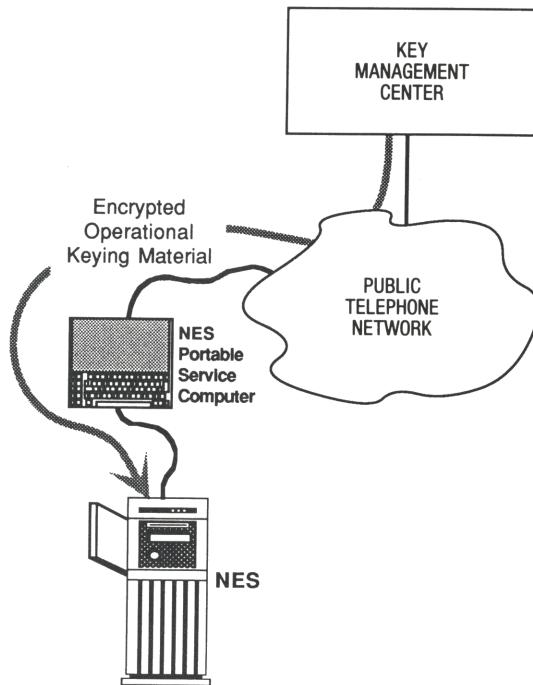
### LAYER 2 SECURITY

- Highest Performance and Speed
- Operates with Equipment Configured for Layer 3
- Promotes Transparent Operation



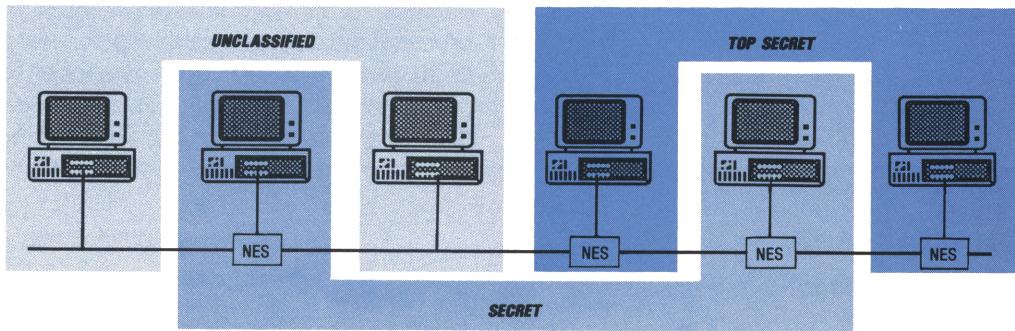
## **ENCRYPTED ELECTRONIC KEYING**

- Reduces Maintenance and Support Costs
- Improves System Security



## **MULTILEVEL SECURITY SUPPORT FOR LAN**

- Divides LAN backbone into Single-Level, System High LANs
- Allows Simultaneous coexistence of different security levels on LANs



## SPECIFICATIONS

### INTERFACE

IEEE 802.3  
IEEE 802.4  
EIA RS-449  
EIA RS-232  
Optional interfaces planned

### PROTOCOLS

TCP/IP  
ISO  
MAP/TOP  
DECNET

### PERFORMANCE

100 packets/sec, 10 Mbps transfer rate,  
750 kbps throughput rate, half duplex.  
Supports 250 open crypto channels

### PHYSICAL PARAMETERS

Size: 17" H × 7" W × 18" D  
Stand-alone or rack mountable  
Additional physical sizes planned

### INPUT POWER

200 watts max,  
100 watts typical  
90-125 V, 47-63 Hz  
Single phase

### BATTERY

Panasonic BR-EZ 6 V Lithium  
Operational Life: 1.3 years

### POWER REQUIREMENT

115 Vac @ 1.4A (typ.), 2.3A (max.)

### OPERATING ENVIRONMENT

0 to 55°C

### STORAGE ENVIRONMENT

-40 to 85°C

### HUMIDITY

5 to 90% (noncondensing)

### MTBF

20,000 hours

### DESIGN FEATURES

VME bus architecture  
Commercial VME I/O boards  
Extensive use of VLSI throughout

### SECURITY FEATURES

Approved Government keying algorithms  
Approved Government crypto algorithms  
Meets NACSIM 5100A  
Tamper proof



**MOTOROLA INC.**

*Communications Division*

Specifications subject to change without notice.

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