



EKC-100G

ETHERNET CRYPTO DEVICE LAYER-2 ENCRYPTOR

100Gbps Ethernet Encryptor Device (EKC-100G); provides high-speed, low-latency secure data transfer over unsecured Ethernet (L2) networks.



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LAYER-2 ENCRYPTOR

TECHNICAL SPECIFICATIONS

Primary Applications	Data center interconnectivity Secure connectivity for operational continuity and disaster recovery Secure data connectivity for Active-Active systems
Communication Protocols	IEEE 802.3 Ethernet (Layer-2) VLAN Tag Encrypt/Bypass feature
Performance	100 Gbps full-duplex (200 Gbps aggregate) Provides line-rate performance for all frame sizes Low latency < 30us
Security	Data confidentiality up to "CONFIDENTIAL" level COMSEC approval Authentication Data integrity Replay attack prevention Tamper protection with or without power Emergency erase button Emergency erase via local console Memory based Crypto Ignition Key (CIK)
Security Protocols	MACSec (IEEE 802.1AE) based customized protocol Provides transparent security for all protocols over Layer-2 MKA (MACSec Key Agreement) Support multiple simultaneous point-to-point security associations
Algorithms	Approved encryption and authentication algorithms for "SECRET" level Hardware-based implementation Support for National algorithm (Type-A)
Access Security	Two-factor authentication (Smart card and password) Different user privilege levels (administrator, viewer, etc.)
Key Management	MKA (MACSec Key Agreement) support Key loading with smart card Key retention during power outages
Network Interfaces	100 GbE (100 Gigabit Ethernet) Fiber QSFP28 Long and short range optic modules RJ-45 10/100/1000 Mbps management interface
Monitoring	Event logging Alarm logging Operation logging Power-Up and On-Demand BIT
User Interface	User-friendly menus with guided help support Local management serial console Audible alarms and indicator LEDs External user replaceable battery
Device Management	Command-based configuration via local management (console) User-friendly command set Configuration Backup and Restore Software upgrade over network
Power Supply	AC (150-264 VAC, 47-63 Hz) Redundant hot swap power supplies or DC(-48V) Power consumption < 200 W
Environment	Operating temperature: 0°C to +45°C Storage temperature: -20°C to +65°C Relative humidity: 90% at +40°C
EMI/EMC	MIL-STD-461E/F
TEMPEST	SDIP-27/2 (Level A).
Physical Specifications	Weight < 15 kg 19" Rack mountable Dimensions: 450mm(W)x880mm(L)x527mm(H)

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