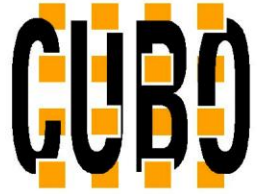# TRANSPORT CUBE
> Encryption Unit

D-5121-Rev.A

Overview

- The TRANSPORT CUBE series is a comprehensive carrier grade, cost effective and very modular platform that combines multi-protocol transport for metro applications. The TRANSPORT CUBE enables network operators to implement a wide range of signal boosting, media conversions, optical protection switching and last but not the least Ethernet security. The Encryption Unit is a compact unit that fits into 1 slot of any of the TRANSPORT CUBE chassis and protects the Ethernet against eavesdropping and harmful manipulation. For further information on TRANSPORT CUBE, please refer to the datasheet D-5052.
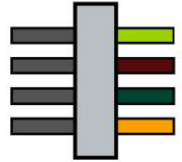

Applications

- Metro network protection against unauthorized access.
- Point-to-point information security.

Repeating & Conversion made simple.

Features

- IEEE 802.ae compliant MAC security
- AES based layer 2 encryption algorithm.
- CTR mode (CM) of operation with random key change.
- Access authorization via verifying Integrity Check Value (ICV).
- Encryption latency less than 5µs.
- Optional line protection switching.
- Data rate: 1GbE and 10GbE.
- Single (1310nm or 1550nm) or multiple (CWDM or DWDM) operating wavelengths depending on used transceivers.
- System Management via Web terminal, EMS, NMS. SNMP v2, MIB II.
- Multiple chassis versions: 1RU chassis with 4 services and 6RU chassis with 12 services.
- Compact chassis design. Compliant with IEC 60297-2 and ETS 300119-2 (300mm depth).
- Redundant and modular power supplies. AC and DC. In-service replaceable.
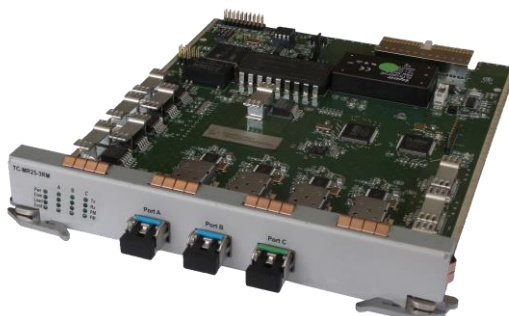- Modular filter and fan unit. In-service replaceable.

Cube Optics AG

Unit overview

Unit	Function	Remarks
TC-MR25-3RME TC-MR25-3RM EHD	Layer 2 encryption for 1GbEthernet	Ports: 1000BASE-SX,-LX (SFP)
TC-MR100-3RME	Layer 2 encryption for 10GbEthernet	Ports: 10GBASE-R, -W (XFP)

Encryption Unit TC-MR-25-3RME

General Specifications

Capacity	Services	1RU Chassis: 4 6RU Chassis: 12
Electrical specifications	Power supply (Redundant and hot-pluggable)	-48 VDC 220 VAC
	Consumption	1 RU Chassis: 80W 6RU Chassis: 180W
Enviromental conditions	Operation Temperature	-5° to 50°C (non-condensing)
	Storage Temperature	-25° to 70°C (non-condensing)
	Humidity	5%..85% without condensation
Reliability	MTBF	> 110,000 hours
Conformity	CE	-EMC: EN 55022:1998, EN 50081, EN 55011 -Immunity: EN 61000-4-2/4/5:1995, EN 61000-4-3:1996, EN 61000-4-11:1994 -EN 60950:1995