



MULTI STANDARD DATA ENCRYPTION EQUIPMENT

CM109WB has been designed to protect digital data conveyed over different types of point to point link. CM109WB meets the requirements of DISBEE standard (Digital Intermediate Speed Bulking Encryption Equipment) and is approved for the protection of all levels of NATO classified information. The wide range of available interfaces and the option of loading different algorithms make this product suitable for any type of network architecture and traffic requirements.

The device has a modular construction: the case has two physically separated slots, and each of them can host a crypto module or a power supply module. The power supply module can feed up to five crypto modules.

This allows to create the best configuration to fulfill any installation needs, choosing among the "Crypto+Crypto", "Crypto+PS", "Crypto+empty" configurations.

MAIN FEATURES

- Encryption equipment for point -to-point links
- Strong mechanical structure for data communication security in military applications
- NATO approved algorithm up to TOP SECRET
- National approved algorithm up to SECRET
- Availability of different DTE/DCE
- Local and remote functionalities to manage the traffic keys
- Equipped with CIK device to quickly declassify the equipment to CCI
- Anti tampering mechanism
- Emergency keys erasing switch
- Remote and local control inter face
- Internal diagnostics (BITE)
- Environmental/EMC/TEMPEST in compliance with military standards.

FEATURES

General

Multi-standard digital encryption equipment approved for the protection of all levels of NATO classified data conveyed over different types of point-to-point links (radio or cable connection).

COMMUNICATIONS INTERFACES

EUROCOM from 64 Kbps to 2048 kbps
 ITU-T V11/V35 from 48 Kbps to 2048 kbps
 ITU-T G.703 at 2-8-34 Mbps (HDB3 coded)

INTEROPERABILITY

Bulk encryption equipment belonging to CM109 family
 Equipment compliant to DISBEE standard

KEY MANAGEMENT

Manual key loading via FILL connector
 Remote black key loading via RS232 serial control interface connected to a PC windows compatible
 Number of storable key variables: 60
 Number of key update permitted: 99
 Manual and automatic key change-update procedures
 Internal back-up battery for key preservation in case of power failure

SECURITY

NATO approved algorithm up to TOP SECRET
 National approved algorithm up to SECRET
 Proprietary (on request)
 Anti-tampering
 TEMPEST tested
 Emergency keys erasing
 Equipment enabling by CIK; CCI when CIK is removed

MANAGEMENT

Local via keypad and display on the front panel
 Remote via RS232 serial control interface connected to a PC windows compatible
 Built-in test equipment (BITE)
 Continuous internal test in order to verify that there is no passage of clear traffic from red to black side
 Transparent mode to test the communication line
 Diagnostic via serial control line RS232

ELECTRICAL FEATURES

AC input	115/220 VAC ±15% 45-63 Hz
DC input	24/48 VDC nom. ±15%
Power requirement of a single crypto unit	18W max
Up to 5 Crypto Units can be powered by as single Power Supply unit	

PHYSICAL DATA

The entire chassis has two physically separated module, and each of them can host a crypto unit or a power supply module

Dimensions	483W x 470D x 46H mm (entire chassis)
Weight	9 kg max
Installation	19" standard rack (with assembly kit)

ENVIRONMENTAL DATA

Environment	According to MILSTD-810D
Operating Temperature	-40°C to +55°C
Storing temperature	-55°C to +70°C
Humidity	95% (non-condensing)

ANCILLARIES

FG101

FG101 is a portable device used to store a maximum of 8 red keys or a maximum of 4 encrypted keys, and to transfer them to crypto device. It is endowed with a battery that allows storage of the keys for up to one year.

Line interface in compliance with EUROCOM D/1 Crypto Supplement

Transfer protocol	DS102
Internal battery	BA1372/U 6.75V -BA5372/U 6V.
Dimensions	75 x 150 x 45 mm (H x L x D)
Weight	0.6 kg.

TR101

TR101 is a portable punched tape reader for the transfer of the keys on tape. It is endowed with an internal battery that has duration of one year.

Line interface in compliance with EUROCOM D/1 Crypto Supplement

Transfer protocol	DS102
Internal battery	BA1372/U 6.75V-BA5372/U 6V.
Dimensions	60 x 150 x 45 mm (H x L x D)
Weight	0.7 kg