

CM109C2  
DIGITAL CRYPTO DEVICE





## CM109C2 DIGITAL CRYPTO DEVICE

### DESCRIPTION

CM109C2 is a crypto device used to encrypt digital data, in compliance with the ITU-T G.703 (2 Mbit/s) standard.

The chassis is made of a light aluminium alloy with upper removable cover.

The device comprises four main elements: the power supply, the control and encryption sections, the interfaces and the front panel.

CM109C2 can store up to 60 crypto variables: key downloading is made by a mobile electronic transfer device (punched tape reader or fill gun). The device must be connected between a multiplexer or a digital centre and a radio relay, or an optical line termination or a second digital centre.

It can be used also in networks on transport connections (between gateway, bridges, etc.).

The device has also in clear modalities.

#### Data mode

- 2 Mbit/s synchronous mode

#### Operating mode

- Full duplex
- Auto-sync mode.

#### Functionalities

- Data: 2 Mbit/s
- Selective key downloading
- Selective/total emergency deletion
- Keys updating
- Permanent key storage
- Remote control
- Anti tampering function
- BITE (Built In Test Equipment).

#### Physical data

- Dimensions: 92H x 448L x 395D mm.
- Weight: 13 kg.

#### Electrical data

- Input voltage: 115/220 Vac  $\pm$ 15%  
45-63 Hz; 21-32 Vdc

- Power requirement: 40W max
- Back-up battery: BA1372/U  
6.75V-BA5372/U 6V.

#### Interfaces

- ITU-T G.703 2 Mbit/s.

#### Tempest

- In compliance with AMSG 720B.

#### Encryption Algorithm

- NATO approved
- Nationally approved.

#### Interoperability

- NATO approved DISBEE devices.

#### Key Management System KS109

System elements associated with the CM109 crypto device:

- Personal computer (COTS / MOTS)
- Tape puncher (optional)

- Software application packets to generate, distribute and manage the keys.

### Functions

- Key generation by encryption
- Encrypted keys storage and management by PC
- Encrypted keys transmission by the network management system by fill gun or floppy disk.

### Ancillary devices: FG101



FG101 is a portable device used to store a maximum of 8 keys in compliance with the EUROCOM

D/1 Crypto Supplement, or a maximum of 4 encrypted keys.

It is endowed with a battery that allows the storage of the keys for up to one year.

- Line interface in compliance with the EUROCOM D/1 Crypto Supplement
- Internal supply battery: BA1372/U 6.75V -BA5372/U 6V.

### Physical data

- Dimensions: 75 x 150 x 45 mm (H x L x D)
- Weight: 0.6 kg.

### TR101



TR101 is a portable punched tape reader used to transfer the keys on tape in compliance with the EUROCOM D/1 Crypto Supplement.

It is endowed with an internal battery that has the duration of one year.

- Line interface in compliance with the EUROCOM D/1 Crypto Supplement
- Internal supply battery type: BA1372/U 6.75V -BA5372/U 6V.

### Physical data

- Dimensions: 60 x 150 x 45 mm (H x L x D)
- Weight: 0.7 kg.



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