



## Optical converter

# KO-2g-01 and KO-2g-02

### **Conversion of G.703 trunks to an optical trunk**

### **Operation from a local panel**

### **Rugged compact case**

The optical converter KO-2g-01 and KO-2g-02 is intended to build digital trunks of the bit rate of 2048 kbps based on two multimode optical fibers. Electrical interfaces (symmetrical 120 Ω) are consistent with the G.703 recommendation.

The converter is intended to:

- build its own teletransmission systems having the bit rate of 2048 kbps (G.703) based on leased multimode optical fibers;
- build access connectors to high capacity teletransmission networks;
- build fiber optical trunks, finished with a G.703 contact, enabling the installation in remote objects of KX-30/PCM multiplexers, which provide a wide range of transmission interfaces to subscribers of digital (64 kbps...2048 kbps) and analogue channels.

The converter cooperates on the station side with switchboards and multiplexers of the STORCZYK system by a group encrypting device, by a contact of G.703 type (TRUNK connector). Cooperation directly with a switchboard is also possible, with the omission of an encrypting device (so called "open work").

On the line side, converters cooperate with each other by two multimode fiber optical cables of 62.5/125 μm or 50/125 μm.

After connecting the fiber optical cable, the station cable type SG-2 or SG-4 to the cooperating device and to the supply voltage, the device is ready to work within 1 minute.

The converter KO-2g-01 is powered by 48 V, the converter KO-2g-02 is powered by 27 V.

The KO-2g-01 and KO-2g-02 are devices adjusted to work in the movement and intended to be used in three positions. KO-2g-01 and KO-2g-02 may not be installed directly on the armor of the vehicle or the wall of the container. The installation is possible with the use of special suspension elements provided by the producer (option).



## TECHNICAL PARAMETERS

### BASIC FUNCTIONALITIES

- Optical converter of trunks G.703
- Execution of optical trunk connections
- Speed rate 2048 kbps
- Connections realized by two multimode optical fibres 62.5/125  $\mu\text{m}$  or 50/125  $\mu\text{m}$
- Configuration from a local panel
- Possibility to close a loop and to identify an incorrect signal on interfaces

### INTERFACES

<b>Station electrical trunk</b>	<b>G.703</b> 8D0C13W08SN Souriau connector
<b>Optical trunk</b>	<b>OPTO</b> MFM-002RZN (MFM-49-07-011-5-0.5-LC) Amphenol connector (optionally ST)
Wave length	1330 nm
Transmitter power	-12 dBm $\pm$ 2 dBm
Receiver sensitivity	-28 dBm
Speed rate	2048 kbps

### POWER SUPPLY

Power supply	-48 V (+10%, -20%) – ver. KO-2g-01 +27 V (from 19 V to 35 V) –ver.KO-2g-02
Power consumption	<11 W

### OTHER TECHNICAL PARAMETERS

Dimensions (HxWxD)	65x210x161 mm
Weight	<2 kg
Mechanical and climatic classification	Groups N.7, N.9 and N.11-O-II(A and B), acc. to NO-06-A101 $\pm$ 108 (MIL-STD-810G compliant) (multi-use and continuous use equipment)
Electromagnetic compatibility	NO-06-A200 (MIL-STD-461F compliant) (KRE-02, KCE-02, KCS-01, KCS-06, KCS-07, KCS-08, KRS-02)
Working temperatures	From -30°C to +60°C
Storage temperatures	From -40°C to +65°C
Humidity resistance	95-98% at +40°C



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