



## FEATURES & BENEFITS

# BIDIRECTIONAL TRANSMISSION

The ERC 4000 transmits over one optical fiber 4 video + 1 Closure Contact in one way and a bidirectional data.

#### **PERFORMANCES**

The digital transmission and 10 bits coding vouch a very high quality of the signal. The transmission can run over more than 65 Km of distance.

#### TYPE DIVERSITY

Equipments are adapted to multimode or singlemode optical fibers.

Transmission is done on one optical fiber.

#### INTEGRATION

Transmitter and receiver modules can be plugged either in a stand alone box with multi-purpose power supply or in a 19" 3U chassis with 13 modules capacity. The low consumption of the module allows high concentration in a bay without critical heat risks.

#### SIMPLE TO USE

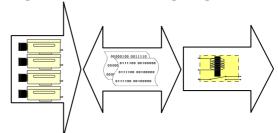
No video setting.
A collation back bus can centralize data on only one in/out connector for the chassis.

#### **FIABILITY**

The low power consumption is the warranty of a great reliability.

3 year warranty.

# DIGITAL TRANSMISSION 4 VIDEO + DATA + C.C ON OPTICAL FIBER





**ERC 4000** is bidirectional transmission equipment. It transmits 4 video, data and closure contact on one optical fiber.

Transmitter and receiver are presented as pluggable modules. ERC 4000 can be plugged either in a stand alone box ERC 17 SA or in the 19" 3U chassis ERC 17-001. Those modules can be removed or insert of their housing under power without any perturbation.

Equipments housed in a chassis can be supervised by the ERC 17 GUARD (HTTP or SNMP) module.

One ERC 17-001 chassis is able to receive up to 13 ERC 4000 modules.

The excellent quality of the video transmission (S/N = 67 dB) is performed by the expertise of processes including digital coding, digital filtering and 10 bits video technology. At the first service, with the help of the AGC circuitry, no setting is required.

As an option the output signal of the receiver is distributed on 2 SMB connectors with the same quality, to double video accesses.

Modules are adapted to the RS 232, RS 422 and RS 485 (4 or 2 wires) standards by internal setting. The back plane of the chassis is designed to collect and centralize data through one access board only.

MINIMA

| VIDEO VIDEO          |                                    |              |                        |
|----------------------|------------------------------------|--------------|------------------------|
| Format:              | PAL, SECAM or NTSC                 | Group delay: | < 10 ns at 4.43 MHz    |
| Number of channel:   | 2                                  | S/N ratio :  | 67 dB (CCIR 567)       |
| Input level:         | $1 \text{ volt } \pm 3 \text{ dB}$ | Impedance:   | 75 Ω                   |
| Output level:        | 1 volt (video AGC)                 | Connector:   | BNC                    |
| Differential Gain:   | < 1 %                              | Connector:   | SMB pour double sortie |
| Differential phase : | < 1 °                              | indicators:  | Video presence         |
| Bandwidth:           | 0 to 5.8 MHz ± 0.2 dB              | Filtering:   | Digital                |

| DATA        |                                   |             |               |
|-------------|-----------------------------------|-------------|---------------|
| Protocol:   | RS 232, 422 or 485 (2 or 4 wires) | Mode:       | Asynchronous  |
| Data rate : | DC to 230 K bauds                 | Connector:  | RJ 45         |
| Impedance:  | 100 Ω or 15 000 <b>Ω</b>          | Indicators: | Data activity |

| OPTICAL OPTICA |                       |             |                          |
|--|-----------------------|-------------|--------------------------|
| Wavelength:  | 1310/1550 nm          | Connector:  | SC/PC or SC/APC          |
| Optical dynamic:   | 28 dB with 9/125 µm   | Indicators: | receiver synchronization |
| Optical dynamic:   | 14 dB with 50/125µm * |             |                          |

<sup>(\*)</sup>Dynamic with 50/125 can be limited by fiber bandwidth.

| MECHANICAL & POWER SUPPLY      |                    |                        |                            |
|--------------------------------|--------------------|------------------------|----------------------------|
| Transmitter module for chassis |                    | Stand alone box        |                            |
| Size:                          | 1 slot             | Main voltage :         | 230 Vac +10/-15%, 50/60 Hz |
| Electrical consumption: 3.2 W  |                    | Or Direct current :    | 8 to 24 Vdc or 8 to 16 Vac |
| Insert/extract:                | Hotswap            | Size:                  | 245 x 135 x 28 mm          |
| Receiver module for chassis    |                    | Chassis & Power supply |                            |
| Dimensions:                    | 1 slot             | Size:                  | 19" 3U                     |
| Electrical consumption: 3.2 W  |                    | Capacity:              | 13 slots                   |
| Insert/extract:                | Hotswap            | Power supply:          | redundant extractible      |
| Indicator:                     | Voltage conformity | Voltage:               | 230 Vac +10/-15% 50/60 Hz  |

| ENVIRONMENTAL |                 |           |                       |
|---------------|-----------------|-----------|-----------------------|
| Operating T°: | - 20 to + 70 °C | Humidity: | 95 % non condensing   |
| Storage T°:   | - 30 to + 80 °C | EMC:      | UTE C70-201 & C70-202 |

### **OPTION:**

The transmission 2 bidirectional audio channels can be included in the modules. (Please contact ERECA Company for more information).

