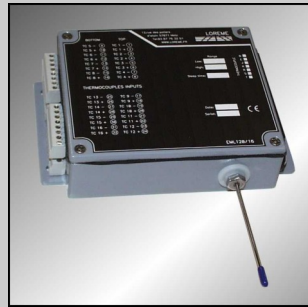




• **EML120 :**

- RF transmitter
- 1 to 16 thermocouples inputs
- 1 to 16 0..4...20mA current inputs
- Supplied by cell
- 200 metres range in open field
- transmission rate programmable



• **RML120 :**

- RF receiver
- up to 16 analog outputs 0..4..20mA
- DIN rail mounting



• **Applications :**

- Rotating machine
- wastewater treatment plant, ...

The transmitter receiver pack (EML120 RML120) allows to transmit temperature measurement by hertz channel with autonomous way (transmitter supplied by cell) . The programmable transmission rate allows folled application to increase response time or autonomy .

Transmitter EML120

The EML120 allows to take some thermocouple measurement (same thermocouple type) and their retransmissions by high frequency channel (433 Mhz), with a configurable transmission rate. At regular intervals, the EML120 quits the standby mode to execute a cycle of acquisition and transmission of measure, the standby time can be adjust from 4 seconds to 15 minutes allowed if necessary to privilege the response time or to improve the autonomy.

The parameters of the EML120 are configurable with RS232 link (thermocouple type and measure interval). The EML120 is supply in standard with a internal cell, confiding it an autonomy of several month according to refresh rate and number of inputs.

An optional power supply by external source is available to have more autonomy (voltage: 4 to 12 Vdc).

The power supply is transmitted to receiver, allowed a distant control of the battery status.

With the radio transmission, the EML120 allows a link of more than ten meters without obstacle influence, there is no dark area with a use of special machines , which allows a fastening without particular problem and a use without maintenance.

The aluminium box of the EML120 brings it particularly proof against shock and vibrations, his small size permits an easy installation over required applications. The pluggable terminal block allows a quick removing of the device to make some measure on an other site.

Receiver RML120

The RML 120 is a high frequency receiver (433 Mhz) controlled by microcontroller. Associated with an EML120, it allows the reception of measurements and their transformation into isolated analog output signals 4..20 mA or 0..10V.

The outputs are individually configurable, measurement range and type of output, 4/20 mA, 0/10 V ... An RS232 link is used to configure the receiver parameters and to display the received information, measured temperatures and voltage level of the receiver. the battery of the transmitter.

The analysis of the frames received by the receiver guarantees the integrity of the measurements transmitted, even in a severe environment.

The analog outputs are set to a configurable security value if the receiver no longer receives information from the transmitter.

Two LEDs allow quick control of the system:

- a green led lights up briefly each time the frame is received correctly or lights up continuously if no frame has arrived at the end of the "timeout" (the outputs go down),
- a red LED lights to indicate a low battery level on the transmitter.

The RML120 is available in DIN rail mounting with plug-in connector and BNC type antenna plug.
(Whip antenna supplied with 2 meters of coaxial cable)
Standard supply voltage 230 Vac.

TRANSMITTER EML120

Up to 16 thermocouple inputs (B, E, J, K, R, S, T), cold junction compensation, linearization, accuracy of +/- 0.8 °C to +/- 2 °C depend of thermocouple type.
 Radio frequency 433Mhz, FSK modulation, transmission baud rate 4800bds, transmission power ~ -8 dBm.
 Power supply : 4 x 1.5V cells type LR06 (ALCALINE)
 Operating under 4 volt.
 management of consumption:
 (autonomy calculation)
 measure cycle : 200 ms / input + transmission time
 Consumption : 5 mA
 standby cycle (confirable from 4 sec to 15 min)
 Consumption : 20 µA

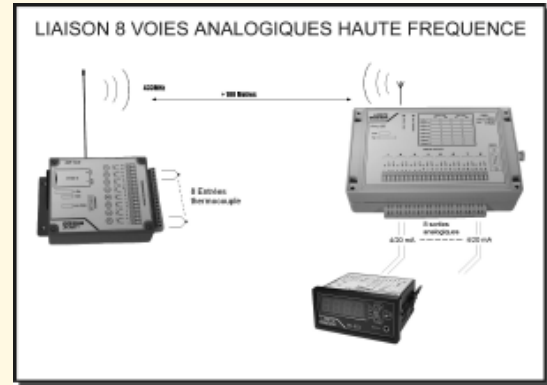
RECEIVER RML120

up to 16 isolated analog outputs 1000 Vac
 type 4...20 mA, 0.....10 V, configurable
 load: ~ 600 ohms
 voltage output on external 500ohms shunt
 12 bits resolution, accuracy : +/- 0.2 %

Receiver: 433 Mhz FSK 4800 bds

sensitivity ~ 1 µV for signal noise ratio of 20 dB

SYNOPTIQUE D'UNE LIAISON



ENVIRONMENT

Operating temperature: -10 to +80 °C
 Storage temperature: -20 to +85 °C
 Humidity: 85 % not condensed

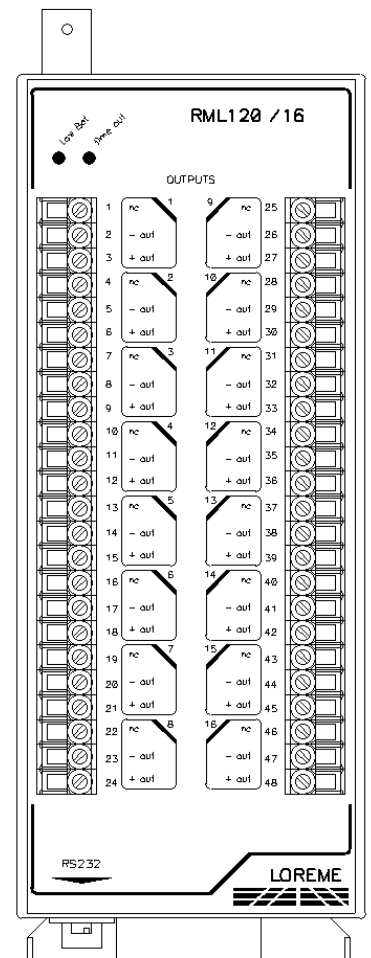
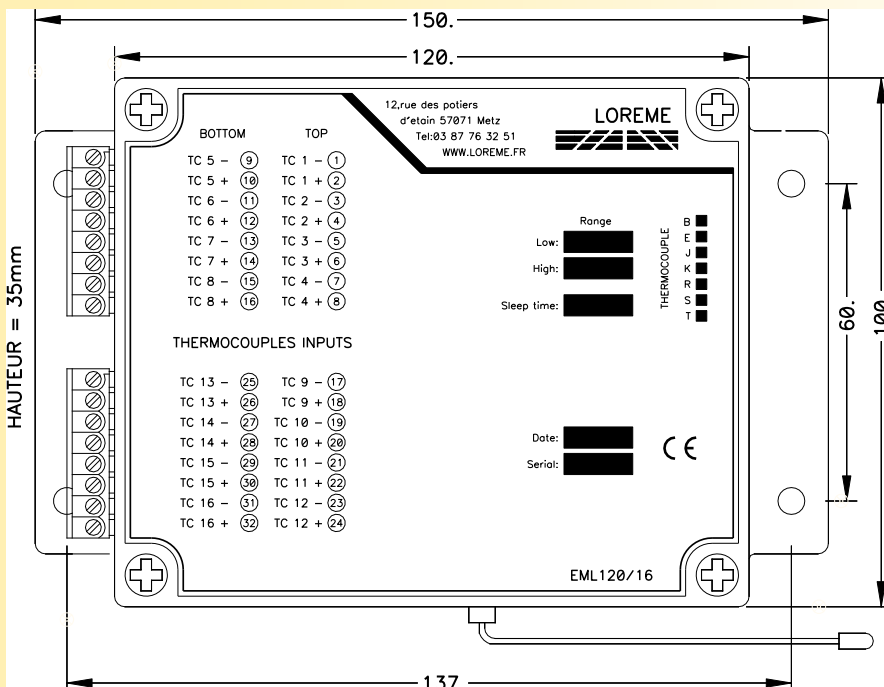
Compatibilité électromagnétique

Normes génériques: **NFEN50081-2 / NFEN50082-2**

EN61000-4-2	sans influence	B
EN61000-4-4	< +/- 3 %	B
ENV50140	< +/- 3 %	A
ENV50141	< +/- 1 %	A
ENV50204	sans influence	A
EN55011	satisfait	groupe1 classe A



WIRING , OUTLINE DIMENSION :



The use of this equipment doesn't require agreement