E321

Low consumption IP emergency telephone systems: SOS call box module

Product specifications

This low consumption IP emergency telephone system is composed by the equipments E311 and E321.

E321 is located in the SOS call box and communicates with the other modules E321 or the line controllers E311 through optical fiber.

Its low consumption in stand by mode allows powering by solar panels-charged batteries, using the charger it incorporates.

The link distance among E321 modules or between a module E321 and the line controller can be even higher than 20 km.

The EQUITEL system composed by the units E311 and E321 allows a redundant ring configuration, with a fault tolerance of one E321 unit or a link between two of them.

One E321 module can be connected to two SOS call box casings.

From the control center, each E321 is seen as an IP module continuously connected to the Ethernet network, and with the same functionality as EQUITEL VoIP module E301.

Excellent echo cancellation and high quality sound thanks to the DSP technology applied in this system.

Optionally, it is possible to have up to 8 inputs / outputs contacts and an additional RS-232 port.

DESICO Vigiplus Software Comliant

Module for low consumption IP emergency telephones

Consumption in stand by mode lower than 100 mW

Up to 50 modules in the same redundant ring for each E311 line controller

Easy configuration via Telnet or Web through the line controller E311

High quality echo canceller

Optional additional outputs and inputs

EQUITEL

Emergency roadside telephones (SOS call box)

Specifications:

Optical interface

Optical emitter	Laser
Optical receiver	PIN
Wavelength:	
M port	1.310 nm
E port	1.550 nm
Type of fibre	Singlemode (9/125 µm)
Emitted optical power	≥ -3,5 dBM
Receivers sensitivity	≤ -18 dBm
Optical connector	ST

Electrical interface (Call box, master or slave)

Speaker impedance	≥ 4 Ω
Speaker output power	5 W RMS
Type of mic	Dynamic or Electret (phantom power supply integrated)
Open door alarm	Contact normally open
Call buttons	Contact normally open

Power requirements

Solar panel voltage[1]	14 ... 25 Vcc
Battery[2]	12 Vcc
Consumption in stand by	≤ 100 mW
Consumption in by pass	≤ 2,5 W
Consumption while active [3]	≤ 10 W

Format and dimensions

Format	Painted stain steel box
Dimensions	193 x 56 x 226 mm

Operating environmental conditions

Temperature	-40 ºC ~ 74 ºC
Humidity	0% ~ 95% (without condensing)

Ordering information:

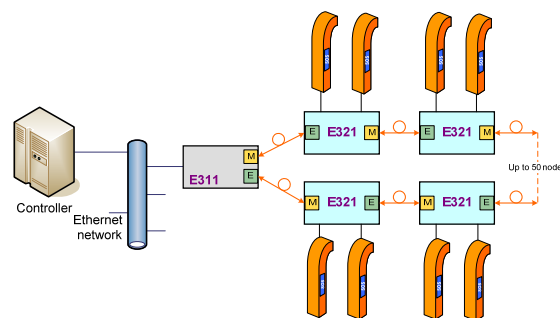| Code	Version
E321	Module for low consumption emergency telephone systems
E321-AUX	Optional module with auxiliary inputs and outputs

Associated equipment:

Model	Description
E311	Line controller of low consumption IP emergency telephone system.

Optical budget and maximum link distances:

Link	Optical budget	Distance [3]	Link conditions
E321-E311	14,5 dB	20 km	Singlemode fiber (9/125 µm), wavelenght = 1.310 nm
E321-E321	14,5 dB	20 km	Singlemode fiber (9/125 µm), wavelenght = 1.310 nm

Sample application:

Notes:

(1)   14V is the minimum voltage required to charge the battery. In absence of battery, the equipment works from 9V on.

(2)   The battery capacity depends on the use conditions, the solar panel employed and the existing environmental conditions (lighting)

(3)   The consumption while talking depends on the audio output level. It is approximately 5 W plus the audio output power.

(4)   Maximum link distances are calculated for typical values of the fiber already installed. For special cases exceeding the given values, please consult the manufacturer

The specifications can be modified without prior notification as a result of the continous improvement process of our systems