

gemino espandibile & gemino4

UNIVERSAL COMMUNICATOR GSM/GPRS

KSI4100010.300 KSI4100020.300



INTRODUCTION

gemino is a Bi-directional Universal GSM/GPRS COMMUNICATOR specifically developed for Professional Security applications, even though its flexibility enables its use in many telecom/communication, industrial and residential applications, basically anywhere there is a need to transmit signals in a reliable manner and in absence of the fixed line (or as alternative to it) in order to protect sensitive installations (like as, but not limited to, industrial plants, solar installations, rural and marine installations, incubators, glasshouses, etc.).

As an interface, **gemino** steadily controls the status of the PSTN line: in case of its absence, all linked communication devices will use the simulated phone line delivered by the communicator, therefore allowing to make and receive calls via GSM with a very high-quality audio output thanks to the adoption of a digital audio channel.

With **gemino4** and **gemino expandable** versions it is also possible to send signals through the contact-ID protocol via GSM net, i.e. to Central Monitoring Stations. Contrary to many other devices currently available in the marketplace, **gemino** integrates the GSM antenna directly on the PCB, making the external antenna basically redundant for the majority of the application while, for particular installations an external antenna can be added and the Communicator can always manage and provide the best quality signal between the two; moreover, other interesting news is that **gemino** offers the possibility to manage 2 different SIM cards, even from 2 different providers, monitoring continuously the status of the GSM network according to three different simultaneous modes: measuring the signal level and quality, verifying the proper registration to the GSM network and detecting the presence of interferences (jamming).

In short **gemino** is in a position to steadily choose which antenna and which SIM card (or provider) has to be used so as to assure the best possible GSM coverage for Security system applications (Patent pending).

Additionally, for all pre-paid SIM Cards, the Communicator includes the credit control and the automatic update of each SIM Card's expiring date upon each new re-charge.

gemino can be programmed in few seconds via a PC linked through the USB port or by using the same port to upload the program from a flash memory with no need to take a PC with. Quite distinctively, it is equipped with the communication KS-BUS in order to be linked with new LCD Keypad of the ergo series: through the Keypad is possible to control the **gemino**, make voice calls and program all **gemino**'s parameters; on the BUS is also possible to link the expander modules, thus offering the possibility to manage up to 10 inputs to activate SMS, voice calls or email, and 2 outputs, basically transforming a simple interface into a powerful communicator. At last, it integrates on board 2 OC (open collector), which can be used to indicate a status (e.g. absence of a PSTN or GSM issues) or programmed to be remotely activated by SMS or CLIP taking advantage to the user recognition feature.



TECHNICAL DATA

Voltage: 13,8 Vdc

• Consumption: 80mA stand-by, 250mA max

• **GSM line:** GSM/GPRS Telit BGA module 22×22 mm (designed in Italy) Quad-Band (850-900-1800

and 1900 MHz)

• Outputs: 2 OC on board (GSM failure and PSTN absence)

• **inputs:** Up to 5/10 programmable on the expander module

• Simulated PSTN line: line voltage: 40V, loop current: 20mA, programmable line tone, ring

voltage: 120Vac

Line selection: DTMF

Operative temperature: +5°C to +40 °C

• PCB dimensions: 92×113×20 mm

• Max. overall – dimensions: 140×102×30 mm

• **Weight:** 170 g

HOW TO ORDER

KSI4100010.300 - gemino expandable (PCBA only)

KSI4100010.310 - gemino expandable with slim plastic housing

KSI4100020.300 - gemino4 (PCBA only)

KSI4100020.310 - gemino4 with slim plastic housing

ACCESSORIES

KSI7401000.010 - White metal cabinet for gemino stand-alon version KSI7302000.010 - Plastic box "slim" version KSI7212012.000 - lead acid battery 12 Vdc-1,2 Ah



ENVIRONMENT PROTECTION

gemino4 and gemino expandable have been designed and manufactured with the following features to reduce environmental impact:

- PVC-free
- Halogen-free laminates and printed circuits unleaded
- low absorption
- Packing made for the most part with recycled fibers and materials from renewable sources



