

# GM862-GPRS GM862-GSM GM862-SMS Backward compatibility

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**NOTE**

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## 1 Introduction

The **Telit GM862-GPRS, Telit GM862-GSM, Telit GM862-SMS modules** are small, lightweight and low power consumption devices that allow digital communication services wherever a GSM 900 and DCS network is present. They are the evolution of the **Telit GM862** and **Telit GM862-S1**

With respect to the **Telit GM862**, the new products present some improvements:

- 1- new products are now Full TA, including by design an internal SIM holder
- 2- the GM862 is now available in 3 different versions, with different pricing, avoiding the developer to spend money for features he doesn't need
- 3- cost reduction and consequently price reduction
- 4- new products have now 7 I/O ports (instead of 2)
- 5- Enhanced management of SMS version (EMS are now supported)

In agreement with **Telit Module Pin-to-Pin Upgrade Policy**, new products have been designed in order to be backward compatible both from HW and SW point of view to the previous models.

However, at present some differences may be present.

The purpose of this document is the description of possible differences among **Telit GM862-GPRS, Telit GM862-GSM, Telit GM862-SMS modules** and the previous model **Telit GM862**

## 2 Different Behavior

Due to the new design the following differences in behavior may arise:

- 1- **HW reset pin behavior**: after the reset signal fall edge, new products turn off after few hundredths of second: please verify the right behavior with your previously designed reset procedure.
- 2- **Pins GPIO3-GPIO7 are now available and active**. Anyway they can be left floating (NC) as in the previous model where they were not available
- 3- **The +CSCB command has been fixed**.

## 3 Hardware changes

- 1- The GM862-GPRS supports only 3V SIM; obsolete 5V SIM are not anymore supported natively, instead an external level translator is required to interface them to the GM862-GPRS.
- 2- The input pin TXD does not have anymore the internal pull-up resistor, so it could be necessary to add an external one.
- 3- The pin PWRCTL (named also START) on the GM862 is a 2,1V signal, while on the GM862-GPRS it has been changed to a 2,8V signal
- 4- The SIMVCC power signal accepts a maximum bypass capacitor of 47nF on the GM862-GPRS, while on the GM862 the maximum acceptable bypass is 330nF.

## 4 Software changes

- 1- The autobauding function is guaranteed only at speeds up to 57600 on the GM862-GPRS, using autobauding at higher speeds may lead to character loss on the GM862-GPRS, to use speeds over 57600 the baud rate must be fixed with AT+IPR command.

## 5 Conformity issues

**Telit GM862-GPRS, Telit GM862-GSM, Telit GM862-SMS modules** are compliant to the essential requirements of the R&TTED (99/5/EC).

If you have already certified your **GM862** based application against the R&TTED (99/5/CE), you can substitute the **GM862** with the new **Telit GM862-GPRS, Telit GM862-GSM, Telit GM862-SMS modules** without any additional testing effort.

This is valid under the following conditions:

1. The user application integrating the **Telit GM862** has been certified under the R&TTE. This certification includes all the applicable EMC, GSM, Safety and health test cases.
2. The hardware and the software of the user application remains unchanged (being the only change the replacement of the **Telit GM862** with the one of the new **Telit GM862-GPRS, Telit GM862-GSM, Telit GM862-SMS modules**)