

## **VX402R-GSM TECHNICAL BULLETIN TAD-220-TB001**

Date of issue 07/04/11

### **Subject - Reduced Battery Life**

#### ***Product Battery Life Summary***

The VX402R-GSM unit may in some cases exhibit lower than expected battery life. The expected battery life (up to 3 years) is based on approximately 1000 messages being sent from the device when in sleep mode with average GSM signal strength and within an operating temperature range of 0-30 degrees Celsius.

#### ***Technical operation summary***

The device is designed to send SMS messages to pre-programmed numbers. Network providers have from time to time (based on the type of SIM card) been known to disconnect SIM cards that have not made a voice based call over an extended time period - a SIM card only sending text messages may be disconnected despite credit being available. In order to reduce the likelihood of this occurring the VX402R-GSM has a feature enabling the device to make periodic voice calls. Recently we have been advised of instances where battery life has been reduced. Investigations have found that battery life has been reduced as a result of this feature not being utilised. This call feature has the additional function of providing the conditions for the device to enter sleep mode, crucial for the anticipated approximate 1000 message battery life to be achieved. Where this feature is not utilised sleep mode is not fully achieved and battery life can be reduced in addition to the SIM card being disconnected by the provider further reducing battery life.

#### ***Solution***

Enable a periodic voice call on the unit in question. This call must be to a valid phone number which will be answered. For details of how to enable this please refer to the VX402R-GSM manual.

#### ***Alternative Solution***

The issue can also now be resolved with a simple upgrade to most devices. After this upgrade has been performed it will no longer be necessary to enable the periodic voice call feature to ensure low power consumption. This upgrade can be undertaken at no cost to the user excluding freight costs for the return and redelivery of the device to and from TAD Electronics. Any device planned for return to TAD Electronics should be accompanied by TAD Electronics' returns form which can be downloaded from [www.tad-electronics.co.uk](http://www.tad-electronics.co.uk), completed and returned with any device.

Other influencing factors that will reduce battery life include but are not limited to:

- The attempted use of a disconnected or otherwise restricted SIM card
- Poor network provider signal strength
- The number of contacts and events programmed for signalling
- Invalid contact numbers
- Excessive Arming and Disarming activity.