

**Ref: FAQ0041****Version: 1.0****Title – Data packet size and SIM card****Made By: AB 27/05/14****(Issue 1)**

Question – SIM Card requirement and data contract required for Radcom UDP GPRS loggers & Radiotech Wi5's

Multilog and ComLog data loggers

UDP format GPRS messages are quite small - about 8-10kB so in terms of monthly data size and cost are insignificant. However in terms of SIM card data contracts make sure that the supplier does not have a minimum data size per month which will unnecessarily increase the cost.

Calculation is as follows -

The 8-10kB size (8000 – 10000Bytes) of each data message means if the logger calls in 3 times per day then the monthly data load is $3 \times 10000 \times 30 = 900000$ Bytes /month = 0.9MB/Month.

Radiotech Wi5 Data hubs

Normally Wi5 datahubs are configured to call data in once per hour with a report once per day at midnight. Data message size depends on the number of transmitters the Wi5 hub is servicing.

1 Transmitter calling in every 15 mins to the hub - packet would be approx. 36Bytes

4 transmitters calling in every 15min would equate to 576 Bytes of data collected by the hub (Wi5) every hour

If the Wi5 is set to send that data to an FTP server every hour, then each of the files it sends will be approximately 1KB (including the GPRS overheads etc)

The Wi5 will also send a Summary report of 650Bytes once a day (by default, this can be increased)

So, with 4 transmitters sending data every 15min, the Wi5 calling in every hour and a single summary report per day, the Wi5 will put approximately 26KB of data onto the GPRS Network in a 24hr period. (0.8 MB per month – normally we recommend 2MB per month cards for between 1 and 100 transmitters)

SIM Cards

1. SIM cards must be GPRS/GSM data enabled (Note for USA Radcom loggers cannot use CDMA which is another mobile technology found in parts of the USA) and capable of receiving and sending SMS text messages
2. SIM cards must be activated by the network provider and assembly to the logger should be carried out with the battery disconnected.
3. For GPRS SIM cards the APN setting, Username and Password need to be obtained from the network provider.
4. If customers choose to source and fit their own SIM cards it is unlikely HWM can help to troubleshoot the equipment if it fails to work. Customer sourced SIMs should be fitted at HWM during equipment build so tests can be carried out to confirm operation.
5. Note for USA - GSM data enabled SIM cards are only provided by AT & T and T-Mobile in the USA
6. Note for USA - The logger must have the modem configured to Band 3 frequency for the USA

Document History:

Edition	Date of Issue	Modification	Notes
First	27/05/14	Release	