



**Model Name:** Telcare BGM V1.5

**FCC ID:** YPTTELCBGM02

This device is labeled and marketed for personal use only, and should not be shared between multiple patients. This device will not be deployed in medical facilities for multiple patients.

The user scenarios are listed below:

1. Each measurement (from blood sampling, glucose testing, data transmission) requires 30 seconds to 1 minute to complete. 30 seconds is chosen for conservative analysis
2. Most patients only test 1-2 times per day, and a patient who is actively managing their diabetes will test 4-6 times per day. 6 times per day, that is, in average 4 hours between each measurement is chosen for conservative analysis
3. Each measurement result is only 128 bytes of data. If the transmission is failed, the system will have a re-try per 1 hour
4. This device also supports airplane mode, and can store several measurement results and the maximum data count to be sent at one time is 50 results.
5. Lowest CDMA2000 SO32 data rate is 9600 bps.
6. The amount of time to attach and detach from the wireless network is varied due to the location and network traffic, alternatively, a conservative 45 seconds is chosen for analysis.

The possible worst case transmission scenario under normal operating condition is:

- 50 measurement results data will be uploaded all at once, and 1 glucose measurement is performed right after.  
Assuming 50 measurements data transmission has failed, the system will resend the data automatically after 1 hour.

Based on the 9600 bps data and the worst case scenario above, the worst case duty factor analysis below:

	Data Size	Time to complete	Transmission time	Duty Factor
Attach and detach to the wireless network		45 seconds	45 seconds	-
50 measurement results transmission	128*50 = 6400 bytes	5.3 seconds	5.3 seconds	-
1 glucose measurement and transmission	128 bytes	30.1 seconds	0.1 seconds	-
Retry Timer 1 hour		3600 seconds	0 seconds	-
50 measurement results transmission	128*50 = 6400 bytes	5.3 seconds	5.3 seconds	-
Summation		3685.8 seconds	55.8 seconds	1.5%

**Remark:**

1. Average duty factor =  $55.8 / 3685.8 = 1.5 \%$
2. 1 byte equals to 8 bits.

According to KDB 447498 D01v05 SAR exclusion threshold:

	Maximum power (dBm)	Maximum power (mW)	Scaled power (mW)	Test separation (mm)	SAR exclusion calculation	Verdict
CDMA2000 BC0	24	251.19	4	5 mm	0.7	The calculation result is < 3, thus SAR measurement is excluded.
CDMA2000 BC1	24	251.19	4	5 mm	1.1	

**Remark:**

1. Scaled power level = maximum power level (mW) \* duty factor
2. Scaled power is rounded to the nearest mW before SAR exclusion calculation.