

2. Specification

2-1. GSM General Specification

		EGSM900 Phase 2	DCS1800 Phase 1	PCS1900
Freq. Band[MHz] Uplink/Downlink		880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990
ARFCN range		0~124 & 975~1023	512~885	512~810
Tx/Rx spacing		45MHz	95MHz	80MHz
Mod. Bit rate/ Bit Period	GRPS	270.833Kbps 3.692us	270.833Kbps 3.692us	270.833Kbps 3.692us
	EDGE	812.5Kbps 3.692us	812.5Kbps 3.692us	812.5Kbps 3.692us
Time Slot Period/Frame Period		576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms
Modulation	GRPS	0.3GMSK	0.3GMSK	0.3GMSK
	EDGE	8PSK	8PSK	8PSK
MS Power	GRPS	33dBm~5dBm	30dBm~0dBm	30dBm~0dBm
	EDGE	27~5dBm	26~0dBm	26~0dBm
Power Level	GRPS	5~19(class4)	0~15(class1)	0~15(class1)
	EDGE	8~19(class E2)	2~15(class E2)	2~15(class E2)
Sensitivity		-102dBm	-100dBm	-102dBm
TDMA Mux		8	8	8
Cell Radius		35Km	2Km	2Km

2-2. GSM TX power class

TX Power control level	EGSM900
5	33±2 dBm
6	31±2 dBm
7	29±2 dBm
8	27±2 dBm
9	25±2 dBm
10	23±2 dBm
11	21±2 dBm
12	19±2 dBm
13	17±2 dBm
14	15±2 dBm
15	13±2 dBm
16	11±3 dBm
17	9± 3dBm
18	7±3 dBm
19	5±3 dBm

TX Power control level	DCS1800
0	30±3 dBm
1	28±3 dBm
2	26±3 dBm
3	24±3 dBm
4	22±3 dBm
5	20±3 dBm
6	18±3 dBm
7	16±3 dBm
8	14±3 dBm
9	12±4 dBm
10	10±4 dBm
11	8±4 dBm
12	6±4 dBm
13	4±4 dBm
14	2±5 dBm
15	0±5 dBm

TX Power control level	PCS1900
0	30±3 dBm
1	28±3 dBm
2	26±3 dBm
3	24±3 dBm
4	22±3 dBm
5	20±3 dBm
6	18±3 dBm
7	16±3 dBm
8	14±3 dBm
9	12±4 dBm
10	10±4 dBm
11	8±4 dBm
12	6±4 dBm
13	4±4 dBm
14	2±5 dBm
15	0±5 dBm

2-3. EDGE TX power class

TX Power control level	EGSM900	TX Power control level	DCS1800	TX Power control level	PCS1900
8	27±3 dBm	2	26±3 dBm	2	26±3 dBm
9	25±3 dBm	3	24±3 dBm	3	24±3 dBm
10	23±3 dBm	4	22±3 dBm	4	22±3 dBm
11	21±3 dBm	5	20±3 dBm	5	20±3 dBm
12	19±3 dBm	6	18±3 dBm	6	18±3 dBm
13	17±3 dBm	7	16±3 dBm	7	16±3 dBm
14	15±3 dBm	8	14±3 dBm	8	14±3 dBm
15	13±3 dBm	9	12±4 dBm	9	12±4 dBm
16	11±5 dBm	10	10±4 dBm	10	10±4 dBm
17	9±5 dBm	11	8±4 dBm	11	8±4 dBm
18	7±5 dBm	12	6±4 dBm	12	6±4 dBm
19	5±5 dBm	13	4±4 dBm	13	4±4 dBm
		14	2±5 dBm	14	2±5 dBm
		15	0±5 dBm	15	0±5 dBm