

## 7.9 Air Interface

Table 29: Air interface GSM / UMTS

Parameter	Conditions	Min.	Typical	Max.	Unit			
HSDPA / UMTS connectivity	Band I, II, V							
UMTS Frequency range Uplink (UE to Node B)	UMTS 850 Band V	824		849	MHz			
	UMTS 1900 Band II	1850		1910	MHz			
	UMTS 2100 Band I	1920		1980	MHz			
UMTS Frequency range Downlink (Node B to UE)	UMTS 850 Band V	869		894	MHz			
	UMTS 1900 Band II	1930		1990	MHz			
	UMTS 2100 Band I	2110		2170	MHz			
Receiver Input Sensitivity @ ARP	UMTS 850 Band V		-109		dBm			
	UMTS 1900 Band II		-107		dBm			
	UMTS 2100 Band I		-108		dBm			
RF Power@ ARP with 500hm Load	UMTS 850 Band V	+21	+23	+25	dBm			
	UMTS 1900 Band II	+21	+23	+25	dBm			
	UMTS 2100 Band I	+21	+23	+25	dBm			
GPRS coding schemes	Class 10, CS1 to CS4							
EGPRS	Class 10, MCS1 to MCS9							
GSM Class	Small MS							
GSM Frequency range Uplink (MS to BTS)	GSM 850	824		849	MHz			
	E-GSM 900	880		915	MHz			
	GSM 1800	1710		1785	MHz			
	GSM 1900	1850		1910	MHz			
GSM Frequency range Downlink (BTS to MS)	GSM 850	869		894	MHz			
	E-GSM 900	925		960	MHz			
	GSM 1800	1805		1880	MHz			
	GSM 1900	1930		1990	MHz			
Static Receiver input Sensitivity @ ARP	GSM 850	-102	-108		dBm			
	E-GSM 900	-102	-108		dBm			
	GSM 1800	-102	-107		dBm			
	GSM 1900	-102	-107		dBm			
RF Power@ ARP with 500hm Load (GSM; 1 TX)	GSM 850	31	32	35	dBm			
	E-GSM 900	31	32	35	dBm			
	GSM 1800	28	29.25	32	dBm			
	GSM 1900	28	29.25	32	dBm			



Table 29: Air interface GSM / UMTS

Parameter	Conditions	Min.	Typical	Max.	Unit
RF Power@ ARP with 50Ohm Load (GPRS; 1 TX)	GSM 850		32		dBm
	E-GSM 900		32		dBm
	GSM 1800		29.25		dBm
	GSM 1900		29.25		dBm
RF Power@ ARP with 50Ohm Load (EGPRS; 1 TX)	GSM 850		27		dBm
	E-GSM 900		27		dBm
	GSM 1800		26		dBm
	GSM 1900		26		dBm
RF Power@ ARP with 50Ohm Load (GPRS; 2 TX)	GSM 850		30.50		dBm
	E-GSM 900		30.50		dBm
	GSM 1800		27.75		dBm
	GSM 1900		27.75		dBm
RF Power@ ARP with 50Ohm Load (EGPRS; 2 TX)	GSM 850		25		dBm
	E-GSM 900		25		dBm
	GSM 1800		24		dBm
	GSM 1900		24		dBm