

WCDMA (3G)

3G Cellule Telephone Base station Amplifier Module Technical Specification

Feature Description

The amplifier module is powered from a 27VDC power supply. The design is targeted for the technical requirements of CDMA 2000 or WCDMA (3G) over the frequency range of 1930–1990MHz.

This unit designed for one carrier of CDMA 2000 or WCDMA (3G) standard in the PCS band.

The amplifier design, which is based on LDMOS technology, is composed of an RF line-up and a function board. The RF line-up provides the necessary amplification of the input signal. The function board provides power supplies to the RF board, processes alarms and provides monitoring functions for the external user. The function board also provides for RF shut down in case of a major alarm condition.

RF Specifications

Item	Parameter	Specifications
1	Frequency Range	1930–1990MHz
2	Average Output Power	60 W
3	Modulation	CDMA 2000 or WCDMA
4	Number Of Carriers	one
5	Nominal Gain	64 ± 1dB
6	Gain Variation over Temperature	±1 dB Over nominal value
7	ACPR (1-Carrier CDMA 2000, 1.25MHz spacing)	? -45dBc @ ± 885kHz
8	Input / Output VSWR	? 1.5:1
9	Efficiency	>27 %
10	Noise Figure	? 10dB
11	DC Voltage Power Supply	+27 ± 1VDC