

3G 中继放大器规格书

3G Pico Repeater Amplifier Specification

(Model: RA-1937-2137-23-70)

指标项目 Items		技术指标 Technical
频率 Frequency Range	Uplink	1937.3~2137.3 MHz (Upward wide band)
	Downlink	2127.3~2137.3 MHz (Downward belt band switch)
增益 Gain		≥ 70dB
输出功率 Output Power		23dBm
带内波动 In-band Ripple		≤ 4dB p-p / 3.84 MHz
驻波比 Voltage Standing Wave Ratio		< 1.5
噪声 Noise Figure		≤ 5.0μSec
相邻信道功率比 Adjacent Channel Power Ratio (ACPR)	P ≥ 31 dBm	(Offset 5MHz) ≤ 49dBc
	P ≥ 31 dBm	(Offset 10MHz) ≤ 54dBc
	P < 31 dBm	(Offset 5MHz) ≤ 50dBc
	P < 31 dBm	(Offset 10MHz) ≤ 55dBc
假发射 Spurious Emission		Comply with 3GPP TS 25.106
带外增益 Out-of-Band Gain	2.7 ≤ f offset < 3.5 MHz	≤ 60dB
	3.5 ≤ f offset < 7.5 MHz	≤ 45dB
	7.5 ≤ f offset < 12.5 MHz	≤ 45dB
	12.5 ≤ f offset	≤ 30dB
峰值误差 Peak Code Domain Error		≤ -35dB @ spreading factor 256
互调衰减 In-band Inter modulation Attenuation		Comply with 3GPP TS 25.106
LED指示 Indication LED		Power supply, Alarm, state
ALC&AGC		Support
报警监控系统 Alarm Monitoring System		Alarm for uplink self-oscillation
系统延迟 System Delay		≤ 5μs
阻抗 I/O Impedance		50 Ω
接头类型 RF Connector		N-Female, N-Female
温度范围 Operating Temperature		10 ~ +50 °C
功率电压 Power Supply		AC: 110-230V 50/60Hz to DC +5V
尺寸 Dimensions		140*110*37(mm)
重量 Weight		< 1kg



Our Pico Repeater provides an affordable solution to solve the indoor coverage problems due to signal fading and attenuation caused by architecture obstacles.

It is mainly deployed for small points of in-building wireless signal coverage, when installation of standard repeaters will generate great interference to the wireless network or the area to be covered is widely distributed. And it is designed for easy installation and maintenance.

The Pico Repeater works as a relay between the BTS and mobiles. It picks up the strongest signal from the BTS via the Donor Antenna, linearly amplifies the signal and then retransmits it via the Coverage Antenna to the weak/blind coverage area. And the mobile signal is also amplified and retransmitted to the BTS via the opposite direction.

FEATURES

- Supports 3G network: 1920-2170MHz;
- Smart Automatic Gain/Level Control (AGC/ALC) ensures output level stable and adjustable continuously;
- Indoor coverage area up to 500 m²;
- Easy installation (Plug and Play).

APPLICATION

To expand signal coverage or fill signal blind area where signal is weak or unavailable.

- Small blind area or weak-signal area, e.g. underground or semi-underground rooms, small basements, underground parking lots;
- Small zones with hot traffic: meeting rooms, supermarkets, offices, pubs, coffee shops, gyms...
- Elevators (especially when cabling in the elevator shaft is difficult);
- Private homes or villas at outskirts with bad signal coverage

