

1800&2100 Dual Band Repeater 0dBm

Model No.: CRF-1821-E0F

Product Features:

- LCD display of operating figures.
- Real time isolation check and alarm.
- **Self oscillation elimination**, auto degrading of output power in case of insufficient isolation detected.
- **Auto turn-off** in case of excessive self oscillation or over input.
- **Idle turn-off**, auto turn-off of uplink while no active users in the coverage , lowering interference to BTS.
- **MGC**, Manual control of output gain with 1dB step in the range of 31dB.
- **ALC**, auto control of output power for stable coverage.
- Linkage between uplink and downlink gain, keeping uplink and downlink balanced.
- Compact size, low power consumption and easy to install.
- **MTBF**: up to 100,000 hours.

Specifications:

Item		Uplink	Downlink
Frequency Range	1800	1710-1785MHz	1805-1880MHz
	2100	1920-1980MHz	2110-2170MHz
Output power		20 dBm	0 dBm
Gain		60 dB	60 dB
Ripple in band		≤6~15 dB	≤6~15 dB
VSWR		≤2.5	≤2.5
Max. input power without damage		-10 dBm	-30 dBm
Intermodulation products		≤-30dBm	≤-40 dBc
Spurious emission	9KHz~1GHz	≤-36 dBm	≤-36 dBm
	1GHz~12.75GHz	≤-30 dBm	≤-30 dBm
ATT Range		31 dB	31 dB
ALC active 10dB		Δ ≤2 dB	Δ ≤2 dB
LCD Indication	Band	Band name & frequency	
	Gain	Uplink & downlink gain	
	Pout	Downlink output power	
	Work	Operating normally: display; Idle turn-off: no display	
	ISO	Operating normally: no display; Degraded output power:	
Idle turn-off	While working at max. gain, if uplink input is <-85dBm (idle threshold value) for 5±1 continuous minutes, system will turn off uplink PA; whenever the uplink input is >-80dBm, it will turn on uplink PA instantly.		
Self oscillation elimination & turn off	Real time isolation check and alarm: if self oscillation (isolation<gain) is detected, system will degrade the output power; if excessive self oscillation(isolation<gain - 15) is detected, it will turn off the device.		
Over input turn-off	If input is out of ALC range, system will turn off both uplink and downlink PA in 5s, and reboot them in 30+-5s; If input is out of ALC range for 5 consecutive times, the system will permanently turn off the devices, until the system is turned on again.		
Noise figure		≤8 dB	≤8 dB

Group delay	$\leq 1.5 \mu\text{s}$	$\leq 1.5 \mu\text{s}$
Power supply	DC: 5 V / 2 A	
RF connector	N-Female	
Environment conditions	IP40	
Operating temperature	-10°C to +55°C	
Size	220*140*37mm	
Weight	<1.2kg	

