

Digital LTE1800/2100 Dual Band Line Amplifier

Model: TS-LA-DW-37

The Line Amplifier is designed to provide a more cost-effective solution than adding a new Base Transceiver Station (BTS) to improve signal coverage and communication quality in LTE1800/2100 system. And its easy installation and maintenance can help carrier get fast return.

The line amplifier is working as a relay between the BTS and mobiles. It receives the low-power signal from 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

- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corroding
- Low interference to BTS by adopting linear amplifier with high gain and low noise
- Adopting filter with highly selectivity and low insertion loss eliminates interference between uplink and downlink
- USB port provides a link to a notebook for local supervision or to the built-in wireless modem to communicate with the NMS (Network Management System) that can remotely supervise repeater's working status and download operational parameters to the repeater

Applications

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

Outdoor: Airports, tourism regions, golf courses, tunnels, factories, mining districts, villages, ...

Indoor: Hotels, exhibition centers, basements, shopping malls, offices, parking lots, ...

Technical Specifications

Item		Specification	
		Downlink	Uplink
Frequency Range (MHz)	LTE 1800 Band	1805 ~ 1870	1710 ~1775
	LTE 2100 Band	2110 ~2170	1920 ~ 1980
Bandwidth(MHz)	LTE 1800 Band	65	65
	LTE 2100 Band	60	60
Max. Total Output Power (dBm)		37±2	-10±2
Gain (dB)		45±3	45±3
Max. Input Power With no damage (dBm)		10	-10
ATT Adjustable Range (dB)/(Step) 1dB		0~20 @ 1 dB step	
ATT Adjustable Error (dB)	1 ~ 10	≤ ±1.0	≤ ±1.0
	11 ~ 20	≤ ±1.0	≤ ±1.0
	21 ~ 30	≤ ±1.5	≤ ±1.5
ALC (dB)		0~20	
Noise Figure (dB) (Max. Gain)		/	≤ 7.0
Ripple In Band (P-P) (dB)At +25°C	LTE 1800 Band	≤ 7.0	
	LTE 2100 Band	≤ 6.0	
Input / Output VSWR(Power up, Min Gain, Pin=-30dBm)		≤ 1.8	≤ 1.8
Time Delay (us)		≤ 5.0	≤ 5.0
EVM (%)		≤ 6	
Spurious Emission (dBm)@ Out Of Band 2.5MHz Offset	LTE 1800 Band; LTE 2100 Band;	≤ -36dBm/1kHz@9kHz~150kHz	
		≤ -36dBm/10kHz@150kHz~30MHz	
		≤ -36dBm/100kHz@30MHz~1GHz	
		≤ -30dBm/1MHz@1GHz~12.75GHz	
RF Connector		N(f)	
Input / output Impedance (Ω)		50	
Power Supply		AC110/220V	

Power Consumption (Watts)	≤150
Temperature Range (°C)	-5 ~ +45
Humidity Range (%)	5~80
Weight (Kg)	<35
Dimension (mm)	450*303*156
Monitor & Alarm	Local with USB; Remote with RJ45;

Outline Dimension:

