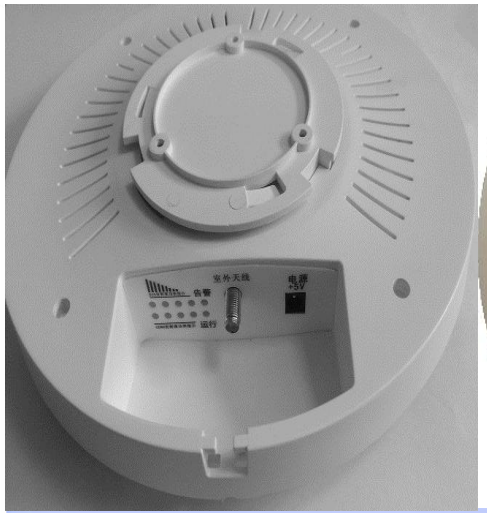
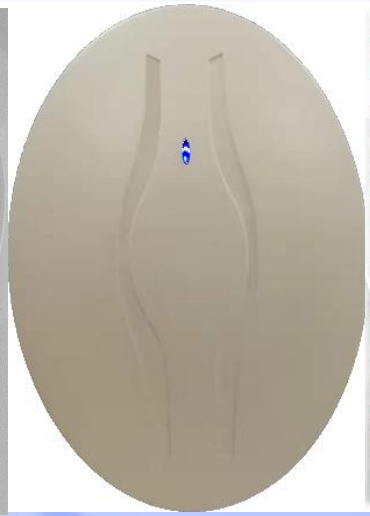
TECHNOLOGY

www.ibscomponents.com

Home signal amplifier introduction





Summary

Home amplifier is a perfect solution to solve and optimize the weak signal of houses, offices, hotels, elevators, underground parking and other small weak signal area.

Working principle:

The outdoor antenna receives the signal from the nearest mobile base station and sends the signal through the coax cable to the installed Home amplifier. The amplifier can amplify the signal , then the amplified signal is sent to the indoor antenna , the indoor antenna can transmit the signal into your house , so you can enjoy clearer phone call or faster mobile date inside your house.

Product structure and accessories

Amplifier

Antenna & cable

Installation accessories

AC Adapter

Product Category

	Mode type	Frequency band	Output power	system
Single band	SB-800-A100	Band5	100mW	FDD
	SB-900-A100	Band8	100mW	FDD
	SB-1800-A100	Band3	100mW	FDD
	SB-2100-A100	Band1	100mW	FDD
	SB-2600-A100	Band7	100mW	FDD
	SB-T1900-A100	Band39	100mW	TDD
	SB-T2600-A100	Band38	100mW	TDD
Double band	DB-0809-A200	Band5&Band8	200mW	FDD
	DB-0918-A200	Band3&Band8	200mW	FDD
	DB-0818-A200	Band3&Band5	200mW	FDD
	DB-0821-A200	Band1&Band5	200mW	FDD
	DB-0921-A200	Band1&Band8	200mW	FDD
	DB-1821-A200	Band1&Band3	200mW	FDD
	DB-T1926-A100	Band39&Band38	100mW	TDD

Main Features:

1) Wide Input Voltage: Input DC Voltage Range 5-15V

2) Integrated service antenna , It is Easy to install

3) Self-oscillation Elimination:The system detects self-oscillation, first reduces the link gain, then detects the loop, and finds that the self-oscillation is eliminated, the system returns to normal working state, otherwise, the power is turned off to prevent interference signal.

4)AGC (Automatic Gain Control):When the downlink output signal is too strong or self-oscillated, the uplink and downlink can automatically reduce the gain and reduce the interference signal.

Main Features

5)Automatic Power Shut-down : When the self-oscillation happens, and the link attenuation value reaches 20dB, the MCU sends out the instruction and shut-down the PA.

6) ALC(Automatic Level Control):Automatically adjust the output gain down to optimal figure while the output gain is above the optimal figure by the ALC circuit, this can greatly optimize the calling quality, data transfer quality, avoid the signal self- oscillation, and also very much reduce the interference to the cell tower, even if your house is very close from the cell tower, you don't need to worry about the interference and the trouble caused.

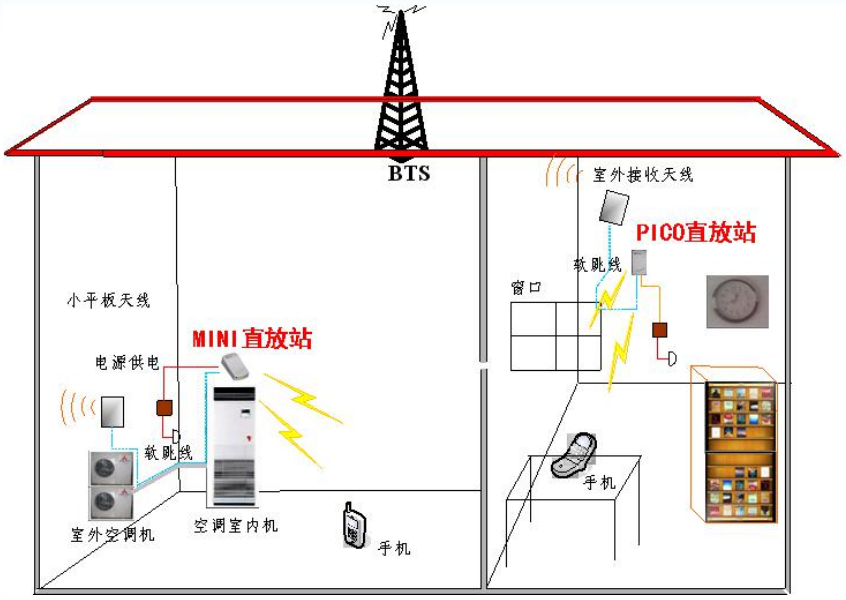
Electrical specification

item		specification	
Frequency	DL	935～960MHz	1805~1880MHz
	UL	890～915MHz	1710-1785MHz
Output power(max)		17±2dBm	20±2dBm
Ripple		≤8dB(Peak to Peak)	
Gain		65±3dB	
ALC		≥25dB（When adding ≤10dB at max. output variation ≤±2dB, When adding >10dB, output variation ≤±2dB or be off.）	
Max. input without damage		-10dBm	
Gain for service ant		0dBi	
NF		≤8dB	
Tx/Rx Isolation		≥80dB	
VSWR		≤1.8	
Time Delay		≤1μs	
IMD		≤45dBc	
EVM（UMTS&LTE)		≤8%	
RF impedance		50ohm	
Size		Circular φ=204mm h=52mm	
Adapter		Input AC110-240V，output DC5V2A	

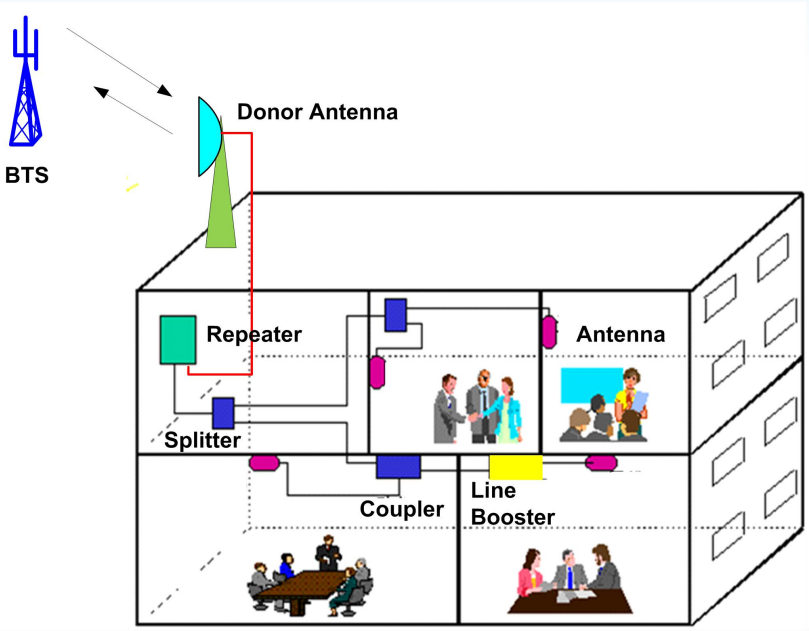
item		specification	
Frequency	DL	869～894MHz	2110~2170MHz
	UL	824～849MHz	1920-1980MHz
Output power(max)		17±2dBm	20±2dBm
Ripple		≤5dB(Peak to Peak)	
Gain		65±3dB	
ALC		≥25dB（When adding ≤10dB at max. output variation ≤±2dB, When adding >10dB, output variation ≤±2dB or be off.）	
Max. input without damage		-10dBm	
Gain for service ant		0dBi	
NF		≤8dB	
Tx/Rx Isolation		≥80dB	
VSWR		≤1.8	
Time Delay		≤1μs	
EVM（UMTS&LTE)		≤8%	
RF impedance		50ohm	
Size		Circular φ=204mm h=52mm	
Adapter		Input AC110-240V，output DC5V2A	

item	specification	
Frequency	1880~1920MHz 2575~2635MHz	
Output power(max)	17±2dBm (UL)	20±2dBm (DL)
Ripple	≤3dB(Peak to Peak)	
Gain	65±3dB	
ALC	≥25dB（When adding ≤10dB at max. output variation ≤±2dB, When adding >10dB, output variation ≤±2dB or be off.）	
Max. input without damage	-10dBm	
Gain for service ant	0dBi	
NF	≤8dB	
Tx/Rx Isolation	≥80dB	
VSWR	≤1.8	
Time Delay	≤1μs	
EVM（TD-LTE)	≤8%	
RF impedance	50ohm	
Size	Ellipse 199mm×140mm×33mm	
Adapter	Input AC110-240V，output DC5V2A	

Application



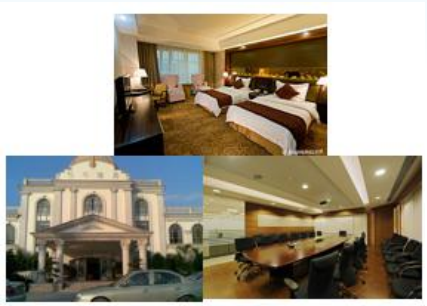
Separate application



application in DAS

Application

apartment



hotel, meeting room

Basement Parking

Village in City

countryside

Application Example

A hotel in Shenzhen

a hotel in Shenzhen ,Before chose our home amplifier, the mobile phone signal was very weak, we couldn't make a phone call at all

When they choose our home amplifier, the signal of mobile phone is very strong, We can make phone calls free and fast Internet access


Thank You !
www.ibscomponents.com