

Home/Office Cell Phone Signal Booster

Overview

C20L Series with LCD Display

C20L series smart signal repeater is a latest high-end product, researched and developed by Amplitec. It is designed with technology and environment oriented conception, as a perfect combination of environmental protection and signal coverage. It carries with features like novel appearance, high intelligence, high circuit integration, low cost, low power consumption, etc.

Aluminum alloy specular shell makes it more technical sense. Large-size LCD screen with blue backlight help users easily get each operating parameter. Smart functions including isolation detection, self-excitation elimination, uplink auto standby and uplink&downlink gain linkage make easier and quicker installation. C20L series repeater provides a rapid and perfect solution to solve and optimize the weak signal of houses, offices, hotels, elevators, underground parking lots and other small weak signal area.



Product Feature

- Large-size screen to clearly shows operating parameters.
- Real-time isolation detection function, automatically detect and alarm when in insufficient isolation.
- Self-excitation elimination function, automatically decrease the gain when self-excite which causing by insufficient isolation.
- Auto-shutoff function, automatically cut down downlink output power when in severe self-excitation and over input power.
- Uplink auto-standby function, device enters standby mode when no user in the coverage area to save power consumption.
- Manual gain attenuation, with 1dB step to attenuate the gain among 1-31dB range
- Auto-level control function to ensure stable coverage.
- Uplink and downlink gain linkage function to keep the balance of uplink and downlink.



Installation Example

Specification

Items		Uplink	Downlink
Model/Frequency Range	C20L-B5	824 ~ 849 MHz	869 ~ 894 MHz
	C20L-B8	(880)890 ~ 915 MHz	(925)935 ~ 960 MHz
	C20L-B3	1710 ~ 1785 MHz	1805 ~ 1880 MHz
	C20L-B1	1920 ~ 1980 MHz	2110 ~ 2170 MHz
	C20L-B7	2500 ~ 2570 MHz	2620 ~ 2690 MHz
	C20L-B20	832 ~ 862MHz	791 ~ 821 MHz
	C20L-B28	703 ~ 733 MHz or 718~748 MHz	758 ~ 788 MHz or 773 ~ 803 MHz
Output Power		15±2 dBm	20±2 dBm
ALC Active 10dB, Output Power Variation		Δ ≤2 dB	Δ ≤2 dB
Rated Gain(Center Frequency)		65±3 dB	70±3 dB
Ripple in Band	CDMA≤8 dB / EGSM≤15 dB / GSM≤8 dB / DCS≤10 dB / WCDMA≤6 dB / LTE7≤8 dB / LTE20≤15 dB / LTE28≤8 dB		
Intermodulation Products	9KHz~1GHz	≤-45 dBc	≤-45 dBc
	1GHz~12.75GHz	≤-30 dBm	≤-30 dBm
Spurious Emission	9KHz~1GHz	≤-36 dBm	≤-36 dBm
	1GHz~12.75GHz	≤-30 dBm	≤-30 dBm
ATT Attenuation (Center Frequency)	1 ~ 10dB	Δ ≤1dB	Δ ≤1dB
	10 ~ 20dB	Δ ≤1.5dB	Δ ≤1.5dB
	20 ~ 30dB	Δ ≤2dB	Δ ≤2dB
LCD Indication	Band	Frequency	
	Gain	Uplink&downlink gain	
	Pout	Downlink output power	
	Work	Normal operating: Display , Uplink idle shutoff: No display	
	ISO	Normal operating: No display, Derating: Display, Self-excitation shutoff: Flash	
	ALC	Not active: No display, Active 5-10dB: Display, Active 15-29dB: Flash	
Idle Shutoff	@Max. Gain, uplink 5±1 minutes continuous input signal < -85dBm(Idle threshold setting), uplink PA will be OFF, once input signal ≥ -80dBm, uplink PA will be ON at once.		
Real-time Self-excitation Elimination	Test on downlink. Derate the gain value when the device is self-excited(Isolation is less than the gain). If in severe self-excitation(The isolation is 15dB less than the gain), it will auto shutoff.		
Auto-shutoff	Severe self-excitation shutoff, over input signal shutoff(If beyond ALC range, uplink&downlink PA will be OFF in 5s. Restart device after 30±5s. It will permanently shut off if it is beyond ALC range for 5 times, until power-on again.		
Power Supply		DC: +5 V	
Power Consumption		<6 W	
RF Connector		N-Female	
Operating Temperature		-10℃ ~ +55℃	