

A23 Series Four Band Cellphone Signal Boosters for Vehicles



Product Overview:

When you are driving in the suburbs or mountainous areas, there are often weak mobile phone signals to make calls not easy. At this time, you may need to get out of the car to answer the call on your mobile phone. The main reason for this situation is that mobile communication operators have fewer base stations installed in suburban and mountainous areas than in cities for profit's sake. Signals in these areas are relatively weak, and car bodies usually attenuate 5-10dB in terms of signal strength. So the signal in the moving car will be worse.

Amplitec's A23 series four band cellphone signal boosters for vehicles are designed and made to solve the above problem. They work as follows. The receiving antenna on the roof of the car picks up signals from the nearby base station, and it is connected to the signal booster in the car through the feeder. Then the booster amplifies the signal and transmits it to the mobile phone by the coverage antenna in the car. Meanwhile, the mobile phone signal in the car is sent to the booster through the in-car antenna, and then amplified,

strengthened and sent to the base station by the outside antenna to realize the call.

Product Features:

- ◆ All aluminum alloy shell case, better heat dissipation;
- ◆ With industrial-grade electronic components, suitable for high temperature environment;
- ◆ Low noise design, low interference;
- ◆ Low power consumption design, with 12V vehicle power supply ;
- ◆ With linkage balance;
- ◆ Compact and elegant appearance, easy to install;
- ◆ MTBF up to 100,000 hours.

Model List:

Model NO.	Uplink Frequency Range	Downlink Frequency Range
A23-B1B3B5B7	824~849/1710~1785/1920~1980/2500~2570MHz	869~894/1805~1880/2110~2170/2620~2690MHz
A23-B1B3B7B28	703~748/1710~1785/1920~1980/2500~2570MHz	758~803/1805~1880/2110~2170/2620~2690MHz
A23-B2B4B5B7	824~849/1710~1755/1850~1910/2500~2570MHz	869~894/2110~2155/1930~1990/2620~2690MHz
A23-B1B3B7B8	880~915/1710~1785/1920~1980/2500~2570MHz	925~960/1805~1880/2110~2170/2620~2690MHz
A23-B1B3B7B20	832~862/1710~1785/1920~1980/2500~2570MHz	791~821/1805~1880/2110~2170/2620~2690MHz

Technical Specification:

Item		Uplink	Downlink
Gain		≥ 50 dB	≥ 50 dB
Ripple in Band		Band 1 ≤ 6 dB / Band 2 ≤ 12 dB / Band 4 ≤ 6 dB / Band 5 ≤ 8 dB / Band 7 ≤ 8 dB / Band8 ≤ 15 dB / Band28 ≤ 15 dB	
Output Power		23 ± 2 dBm	0 ± 2 dBm
Intermediation Products(CW)		≤ -36 dBc @20dBm	≤ -36 dBm
Spurious Emission	9KHz~1GHz	≤ -36 dBm (RBW=30KHz)	≤ -36 dBm (RBW=30KHz)
	1GHz~12.75GHz	≤ -30 dBm (RBW=1MHz)	≤ -30 dBm (RBW=1MHz)
ACRR	5MHz	≥ 20 dB	≥ 20 dB
	10MHz	≥ 20 dB	≥ 20 dB
EVM		≤ 8 %	≤ 8 %
VSWR		≤ 2.5	
Time Delay		≤ 1.5 μ s	
RUN LED Indication	Normal Working	Green	
	Uplink Idle Off(Mute)	Green Flash (slow flashing: 2 times per second)	
	Derated ISO Working	Green Flash (fast flashing: 4 times per second)	
	Stop Working	Turning Off	
Shutoff Function		Available	
Real-time Self Oscillation Elimination Function,		Available	
Linkage Balance Function		Uplink and downlink ALC linkage	
RF Connector		SMA Female	
Power Supply		DC: + 12V	
Power Consumption		≤ 24 W	
Operating Humidity		$-10^{\circ}\text{C} \sim +50^{\circ}\text{C}$	
Dimension		162*122*34mm	
Weight		≤ 1 Kg	