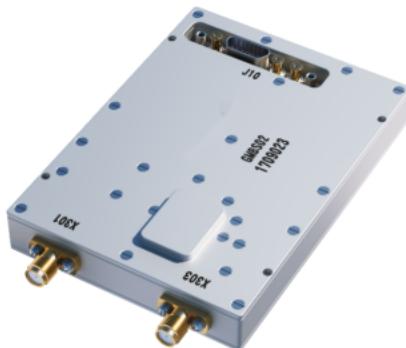


## Platform RF Channel Module



### ➤ Product features

The RF channel unit contains two down-conversion channels, each channel includes RF filter, low-noise amplifier, down-converter, IF filter, IF amplifier, AGC amplifier, frequency synthesizer, clock circuit, crystal oscillator, power supply control and other circuits, located between the antenna unit and the baseband unit, perform low-noise amplification, RF filtering, down-conversion, intermediate frequency filtering and amplification on the radio frequency signal received by the antenna unit, and send the intermediate frequency signal to the baseband unit.

The channel has the characteristics of small size, low noise, high gain, and high third-order intermodulation suppression.

### ➤ Main indicator parameter

Parameter name	Typical value
Model	GMBS02-1709023
A channel electrical performance requirements	
Enter RF frequency	F3 or F4
Input RF Bandwidth	12MHz
Input RF Dynamic Range	-100dBm~ -50dBm
Output intermediate frequency	140MHz
Output IF bandwidth	12MHz
Output IF power	0±1dBm
Noise figure	≤2dB (full temperature)
In-band gain flatness	≤2dB (within 10MHz bandwidth)

Parameter name	Typical value
Model	GMBS02-1709023
Third-order intermodulation coefficient	≤-50dBc (test condition: input -50dBm, double tone interval 1MHz);
Phase noise	≤-55dBc/Hz@100Hz; ≤-65dBc/Hz@1kHz; ≤-75dBc/Hz@10kHz; ≤-90dBc/Hz@100kHz; ≤-103dBc/Hz@1MHz;
B channel electrical performance requirements	
Enter RF frequency	F6
Input RF Bandwidth	8.16MHz
Input RF Dynamic Range	-100dBm~ -50dBm
Output intermediate frequency	110.16MHz
Output IF bandwidth	8.16MHz
Output IF power	0±1dBm
Noise Figure	≤2.5dB (full temperature)
In-band gain flatness	≤2dB (within 8.16MHz bandwidth)
Third-order intermodulation coefficient	≤-50dBc (test condition: input -50dBm, double tone interval 1MHz);
Phase noise	≤-55dBc/Hz@100Hz; ≤-65dBc/Hz@1kHz; ≤-75dBc/Hz@10kHz; ≤-90dBc/Hz@100kHz; ≤-103dBc/Hz@1MHz;
Product size	99.4mm×65mm×15mm
Operating temperature	-55°C~85°C
Custom instructions	
Frequency range and parameter indicators can be customized;	