

# MODEL MP6222

## Overview

The ADIVIC MP6222 GNSS Simulator is a high-performance solution designed for flexible and precise GNSS receiver testing across R&D and production environments.

The MP6222 provides highly accurate control over signal power, position, velocity, and timing, allowing engineers to validate key GNSS receiver metrics such as:

- Signal sensitivity
- Signal-to-noise ratio (SNR)
- Time to First Fix (TTFF)
- Positioning accuracy and deviation

It supports multiple satellite navigation systems—including GPS, GLONASS, Galileo, BeiDou, QZSS and IRNSS—across a wide range of frequency bands. Its robust design ensures stable, repeatable simulations and shortens development and validation cycles.

## Key Features

- Precision Doppler control:  $\pm 30$  kHz range in 1 Hz steps
- Wide RF output level: adjustable from -50 dBm to -140 dBm
- High-precision OCXO oscillator for excellent frequency stability
- Support for multi-constellation GNSS systems (GPS, GLONASS, Galileo, BeiDou, QZSS, IRNSS)
- Upgradeable almanac and ephemeris data
- Full control of simulated position, speed, and trajectory
- Ideal for sensitivity, SNR, and TTFF testing in both lab and production settings

**ADIVIC**  
— RF TEST & MEASUREMENT —

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## GNSS Simulator



### MP6222 Specifications

Frequency Characteristics	
Frequency Range	1100~2600 MHz
Warm-up time	>30 minutes
Frequency Accuracy	$\pm 50$ ppb maximum
Temperature stability	$\pm 20$ ppb maximum
Aging (Per year)	$\pm 100$ ppb maximum
(Per day)	$\pm 1$ ppb maximum
Channels	
Number	32 CH
Navigation data	GPS L1, L2, L5
	BeiDou B1, B2, B3
	Galileo E1, E5, E6
	GLONASS L1
	QZSS L1, L2, L5, L6
IRNSS L5	
Spectral purity	
Phase Noise @ 1 KHz	< -100 dBc/Hz
RF Output Characteristics	
Power level ranged	-50 dBm to -140 dBm
Amplitude Resolution	1 dB step
Amplitude Accuracy	< $\pm 1$ dB
Output Impedance	50 $\Omega$
Doppler Shift	$\pm 30$ KHz
Calibration	
Calibration	1 year
Environmental	
Operating	0 to 50 °C
Relative Humidity	10% to 90%
Storage temperature	-20 to 70 °C
Relative Humidity	5% to 95%
Dimension	427 x 315 x 88.2 mm
Weight	11 kg