Block Parameters: IMU

IMU

Simulate accelerometer, gyroscope, and magnetometer sensors.

The block outputs sensor measurements based on device motion. The inputs are in the local navigation frame. The outputs are in the local sensor body frame. The parameters on the Accelerometer, Gyroscope and Magnetometer tabs can be set to match values on a sensor datasheet.

Parameters | Accelerometer | Gyroscope | Magnetometer

Maximum readings (μT):	1000
Resolution ((μT)/LSB):	0.1
Constant offset bias (μT):	0
Axes skew (%):	[0 0 0]

Noise

White Noise PSD ((μT)/√Hz):	[0.0424 0.0424 0.0424]
Bias instability (μT):	[0 0 0]
Bias instability filter numerator coefficients:	fractalcoef().Numerator 1
Bias instability filter denominator coefficients:	fractalcoef().Denominator [1,-0.5]
Random walk ((μT)*√Hz):	[0 0 0]
Noise type:	double-sided

Temperature Effects

Bias from temperature ((μT)/°C):	[0 0 0]
Temperature scale factor (%/°C):	[0 0 0]

OK | Cancel | Help | Apply