Parameter Index

Gyro Accuracy

Model	TLH-IMU-370D-06J	TLH-IMU-370D-05J	TLH-IMU-350D-03J	TLH-IMU-160D-04J	TLH-IMU-600M-31A
Measuring range	±450° /s	±450° /s	±300° /s	±300° /s	±300° /s
Bandwidth	≥ 200 Hz	≥ 200 Hz	≥ 200 Hz	≥ 200 Hz	≥ 200 Hz
Zero bias repeatability	≤ 0.03° /h,(1σ)	≤ 0.07° /h,(1σ)	≤ 0.3° /h,(1σ)	≤ 0.1° /h+10°/h,(1σ)	10°/h,(1σ)
Zero bias repeatability	≤ 0.03° /h,(1σ)	≤ 0.07° /h,(1σ)	≤ 0.3° /h,(1σ)	≤ 0.1° /h+10°/h,(1σ)	10°/h,(1σ)
Random walk coefficient	0.003°/√h	0.006°/√h	0.02°/√h	0.01°/√h+0.2°/√h	0.2°/√h

Accelerometer Accuracy

Model	TLH-IMU-370D-06J	TLH-IMU-370D-05J	TLH-IMU-350D-03J	TLH-IMU-160D-04J	TLH-IMU-600M-01M
Measuring range	±20 g (or ±30 g optional)	±20 g (or ±30 g optional)	±20 g (or ±30 g optional)	±6 g	±6 g
Bandwidth	≥ 200 Hz	≥ 200 Hz	≥ 200 Hz	≥ 200 Hz	≥ 200 Hz
Resolution	≤ 70 μg	≤ 70 μg	≤ 70 μg	≤ 100 μg	≤ 100 μg
Zero bias	≤ 0.1 mg	≤ 0.1 mg	≤ 0.1 mg	≤ 0.5 mg	≤ 0.5 mg
Zero bias stability, 1σ	≤ 50 μg	≤ 50 μg	≤ 50 μg	≤ 200 μg (1σ)	≤ 200 μg (1σ)
Zero bias repeatability, 1σ	≤ 50 μg	≤ 50 μg	≤ 50 μg	≤ 200 μg (1σ)	≤ 200 μg (1σ)
Scale factor nonlinearity	≤ 40 ppm	≤ 40 ppm	≤ 40 ppm	≤200 ppm	≤200 ppm

System Parameters

Model	TLH-IMU-370D-06J	TLH-IMU-370D-05J	TLH-IMU-350D-03J	TLH-IMU-160D-04J	TLH-IMU-600M-31A
Operating temperature	-40℃ ~+65℃				-40℃~ +85℃
Storage temperature	-55℃ ~+85℃				-55℃~ +105℃
Vibration	5g@20~2000 Hz				5g@20~2000Hz
Impact	40g, 11ms, 1/2 Sine				40g, 11ms, 1/2Sine
Power supply voltage	18~36 VDC	18~36 VDC	9~36VDC	9~36VDC	9~36VDC
Power consumption	28W@28VDC	15W@28VDC	5W@28 VDC	5W@28 VDC	1W@12 VDC
Dimensions (mm)	148.5*148.5*145.5	104*97*72	60*60*40	60*60*40	60.3*51*24
Weight (kg)	≤4	≤1.5	≤1	≤0.25	≤60
Communication interface	RS232*2 (RTK and data line); RS422*2 (data line); CAN*1 (odometer and data line); PPS*1 (synchronous)	RS422*2 (data line); PPS*1 (synchronization)			RS232/RS422, PPS