

### HTS-E1/2 High accurate dual axis MEMS Gyro

HTS-E1/2 series is by high-precision dual-axis MEMS gyroscope with independent intellectual property rights of the localization of MEMS gyro chip and driver pick up circuit, temperature sensor, digital signal processing circuit and control software, etc, used for real-time measurement of two horizontal axial angular rate, through the RS - 422 serial port output after error compensation of two angular rate information, error compensation including temperature compensation, install the misalignment Angle compensation, nonlinear compensation, etc.



Spec	Unit	HTS-E1/2A	HTS-E1/2B	HTS-E1/2C	HTS-E1/2D
Range	°/s	±400	±400	±400	±400
Bias stability (1s smooth, 1σ, room temperature)	°/h	10	10	5	5
Bias error (full temperature range)	°/h	20	20	10	10
Random drift	°/√h	0.2	0.2	0.2	0.2
Bias repeatability	°/h	20	20	20	20
Bias acceleration sensitivity	°/h /g	1	1	1	1
Resolution	°/h	2	2	2	2
Scale factor non-linearity	PPM	100	100	100	100
Scale factor repeatability	PPM	100	100	100	100
Cross coupling	%	0.1	0.1	0.1	0.1
Band width	Hz	200	200	200	200
Phase shift (@40Hz)	°	≤45	≤45	≤45	≤45
Damping ratio	—	≤0.75	≤0.75	≤0.75	≤0.75
Voltage	V	5	5	5	5

Spec	Unit	HTS-E1/2A	HTS-E1/2B	HTS-E1/2C	HTS-E1/2D
Consumption	W	0.5	0.5	0.5	0.5
Working temperature	°C	-40~65	-55~85	-40~65	-55~85
Storage temperature	°C	-55~105	-60~125	-55~105	-60~125
Vibration	—	10~2000Hz,6.06g	10~2000Hz,6.06g	10~2000Hz,6.06g	10~2000Hz,6.06g
Shock	—	5000g, 0.1ms	5000g, 0.1ms	5000g, 0.1ms	5000g, 0.1ms
MTBF	h	20000	20000	20000	20000
Continuous operating time	h	120	120	120	120
Dimension	mm	Φ21.5*30	Φ21.5*30	Φ21.5*30	Φ21.5*30
Weight	g	52	52	52	52