INERTIAL MEASUREMENT UNITS

麦新敏微

The Leader in China Inertial Sensor Market

Micro-Magic

Attitude and Positioning Be Everywhere!

www.memsmag.com

U300-A
INDUSTRIAL GRADE

MEMS Inertial Measurement Unit

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±100 °/sec	±10 /±20 /±40 g
Bias in-run stability (Allan)	5 °/hr	0.08 mg
Bias repeatability	5 °/hr	0.12 mg
Noise (Random walk)	0.12 °/√h	0.1 m/sec/ √ h
Scale factor error	0.1%FS	0.15 %FS
Size	59.6 x 59 x 23.5 mm	
Weight	120 g	

Micro-Magic
Attitude and Positioning Be Everywhere!

麦新敏微

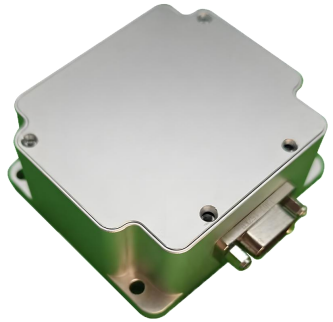
U300-B
INDUSTRIAL GRADE

MEMS Inertial Measurement Unit

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±125/±250/±500/±1000 °/sec	±3 /±6 /±12 /±24 g
Bias in-run stability (Allan)	7 °/hr	0.08 mg
Bias repeatability	7 °/hr	0.18 mg
Noise (Random walk)	0.12 °/√h	0.09 m/sec/√h
Scale factor error	0.1 %FS	0.1 %FS
Size	22 x 22 x 7.4 mm	
Weight	7 g	

U3000
INDUSTRIAL GRADE

MEMS Inertial Measurement Unit



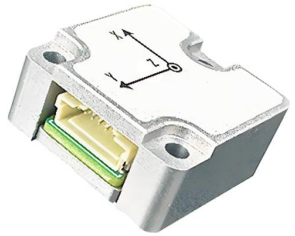
	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±100 °/sec	±10 /±20 /±40 g
Bias in-run stability (Allan)	3 °/hr	0.05 mg
Bias repeatability	3 °/hr	0.12 mg
Noise (Random walk)	0.09 °/√h	0.03 m/sec/ √ h
Scale factor error	0.08 %FS	0.1 %FS
Size	59.6 x 53.4 x 24 mm	
Weight	120 g	

Micro-Magic
Attitude and Positioning Be Everywhere!

麦新敏微

U3500
INDUSTRIAL GRADE

MEMS Inertial Measurement Unit



	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±2000 °/sec	±12 g
Bias in-run stability (Allan)	1.7~4.2 °/hr	0.028~0.05 mg
Bias repeatability	5.7~4.5 °/hr	0.13-0.24 mg
Noise (Random walk)	0.1~0.6 °/√h	0.04~0.08 m/sec/√h
Scale factor error		0.5 %FS
Size	22 x 22 x 10 mm	
Weight	8 g	

U3600
INDUSTRIAL GRADE

MEMS Inertial Measurement Unit

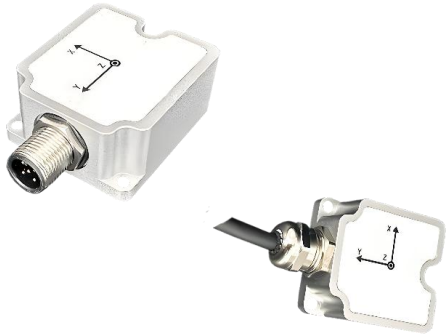
	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±2000 °/sec	±12 g
Bias in-run stability (Allan)	2.5~5.1 °/hr	0.03~0.06 mg
Bias repeatability	0.05~0.09 °/hr	1.5-2.52 mg
Noise (Random walk)	0.3~0.6 °/√h	0.04~0.08 m/sec/√h
Scale factor error		0.5 %FS
Size	26 x 24 x 12 mm	
Weight	11 g	

Micro-Magic
Attitude and Positioning Be Everywhere!

麦新敏微

U3700
INDUSTRIAL GRADE

MEMS Inertial Measurement Unit



	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±2000 °/sec	±12 g
Bias in-run stability (Allan)	1.76~5.1 °/hr	0.021~0.06 mg
Bias repeatability	0.03~0.09 °/hr	0.6~2.52 mg
Noise (Random walk)	0.21~0.6 °/√h	0.028~0.08 m/sec/√h
Scale factor error		0.5 %FS
Size	60 x 40 x 20 mm	
Weight	75 g	

U5000
TACTICAL GRADE

MEMS Inertial Measurement Unit

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±400 °/sec	±10 g
Bias stability (10s)	3 °/hr	0.15 mg
Bias repeatability	3 °/hr	0.15 mg
Noise (Random walk)	0.15 °/√h	0.17 m/sec/√h
Scale factor error	0.015 %FS	0.05 %FS
Size	44.8 x 38.6 x 21.5 mm	
Weight	60 g	

Micro-Magic
Attitude and Positioning Be Everywhere!

麦新敏微

U6300
TACTICAL GRADE

MEMS Inertial Measurement Unit

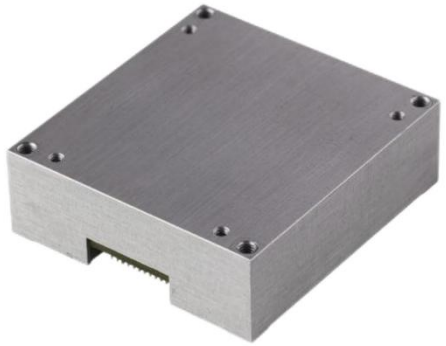
	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±450 °/sec	±20 g
Bias in-run stability (Allan)	0.1~0.5 °/hr	0.01mg
Full-temperature bias stability	5 °/hr	0.15 mg
Noise (Random walk)	0.02 °/√h	0.02 m/sec/√h
Scale factor error	0.01 %FS	0.01 %FS
Size	38.6*44.8*10 mm	
Weight	50 g	

Micro-Magic
Attitude and Positioning Be Everywhere!

麦新敏微

U6488
TACTICAL GRADE

MEMS Inertial Measurement Unit



	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±450 °/sec	±20 g
Bias in-run stability (Allan)	1~4 °/hr	0.0005~0.15 mg
Full-temperature bias stability	5~8 °/hr	0.15~1 mg
Noise (Random walk)	0.03~0.08 °/√h	0.02~0.05 m/sec/√h
Scale factor error	0.01 %FS	0.01 %FS
Size	47 x 44 x 14 mm	
Weight	40 g	

U7000
TACTICAL GRADE

MEMS Inertial Measurement Unit

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±400 °/sec	±30 g
Bias in-run stability (Allan)	0.1 °/hr	0.015 mg
Bias repeatability	1 °/hr	0.1 mg
Noise (Random walk)	0.05 °/√h	0.01 m/sec/√h
Scale factor error	0.01 %FS	0.05 %FS
Size	44.8 x 38.6 x 21.5 mm	
Weight	55 g	

Micro-Magic
Attitude and Positioning Be Everywhere!

麦新敏微

UF100A
TACTICAL GRADE

High Precision FOG Based Inertial Measurement Unit

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±300/±500 °/sec	±10 g
Bias in-run stability (Allan)	0.05 °/hr	0.02 mg
Bias repeatability	0.2 °/hr	0.1 mg
Noise (Random walk)	0.04 °/√h	0.01 m/sec/√h
Scale factor error	100 ppm	300 ppm
Size	φ89 × 78.5 mm	
Weight	600 g	

UF300A
NAVIGATION GRADE

High Precision FOG Based Inertial Measurement Unit

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±300 °/sec	±10 g
Bias in-run stability (1σ, 10s)	0.03 °/hr	0.05 mg
Bias repeatability (1σ)	0.03 °/hr	0.05 mg
Noise (Random walk)	0.003 °/√h	0.007 m/sec/√h
Scale factor error	10 ppm	100 ppm
Size	145 x 122 x 125 mm	
Weight	1800 ±50 g	

Micro-Magic
Attitude and Positioning Be Everywhere!

麦新敏微

UF300B/UF300C
TACTICAL GRADE

High Precision FOG Based Inertial Measurement Unit

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±300/±1000 °/sec	±10 g
Bias in-run stability (1σ, 10s)	0.08/0.1 °/hr	0.05/0.07 mg
Bias repeatability (1σ)	0.08/0.1 °/hr	0.05/0.07 mg
Noise (Random walk)	0.008/0.01 °/√h	0.007/0.01 m/sec/√h
Scale factor error	60/60 ppm	200/300 ppm
Size	145 x 122 x 125 mm	
Weight	1800 ±50 g	

UF100A
TACTICAL GRADE

High Performance FOG Based Inertial Measurement Unit

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±300/±500 °/sec	±10 g
Bias in-run stability (Allan)	0.05 °/hr	0.02 mg
Bias repeatability	0.2 °/hr	0.1 mg
Noise (Random walk)	0.04 °/√h	0.01 m/sec/√h
Scale factor error	100 ppm	300 ppm
Size	φ89 × 78.5 mm	
Weight	600 g	

Micro-Magic
Attitude and Positioning Be Everywhere!

麦新敏微

UF3X80-A/UF3X80-B TACTICAL GRADE

High Performance FOG Based Inertial Measurement Unit

GYROSCOPES	
Maximum dynamic range	±500 °/sec
Bias in-run stability (1σ, 10s)	0.3/0.5 °/hr
Bias repeatability (1σ)	0.3/0.5 °/hr
Noise (Random walk)	0.03/0.02 °/√h
Scale factor error	30/50 ppm
Size	φ80 × 70 mm
Weight	680 ±50 g

ACCELEROMETERS

Can be customerized according to customer's requirement either made by MEMS Accelerometers or by Quartz Accelerometers

UF3X90-A/UF3X90-B
TACTICAL GRADE

High Precision FOG Based Inertial Measurement Unit

GYROSCOPES	
Maximum dynamic range	±500 °/sec
Bias in-run stability (1σ, 10s)	0.1/0.2 °/hr
Bias repeatability (1σ)	0.1/0.2 °/hr
Noise (Random walk)	0.01/0.02 °/√h
Scale factor error	30/50 ppm
Size	φ90 × 78 mm
Weight	780 ±50 g

ACCELEROMETERS

Can be customerized according to customer's requirement either made by MEMS Accelerometers or by Quartz Accelerometers

Micro-Magic
Attitude and Positioning Be Everywhere!

麦新敏微

UF3X100-A/UF3X100-B NAVAIGATION GRADE

High Performance FOG Based Inertial Measurement Unit

GYROSCOPES	
Maximum dynamic range	±500 °/sec
Bias in-run stability (1σ, 10s)	0.05/0.1 °/hr
Bias repeatability (1σ)	0.05/0.1 °/hr
Noise (Random walk)	0.005/0.003 °/√h
Scale factor error	30/30 ppm
Size	100 x 100 × 95 mm
Weight	950 ±50 g

ACCELEROMETERS

Can be customerized according to customer's requirement either made by MEMS Accelerometers or by Quartz Accelerometers

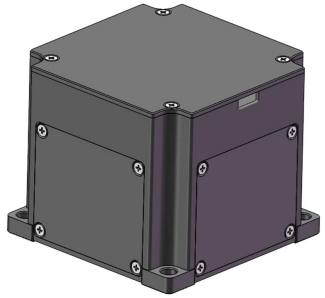
UF500
TACTICAL GRADE

High Performance FOG and Quartz Flexible Accl Combined IMU

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±360 °/sec	±50 g
Bias in-run stability (1σ, 10s)	0.1 °/hr	0.02 mg
Bias repeatability (1σ)	0.8 °/hr	0.1 mg
Noise (Random walk)	0.08 °/√h	0.007 m/sec/√h
Scale factor error	100 ppm	300 ppm
Size	80 x 80 × 60 mm	
Weight	950 ±50 g	

UF600
TACTICAL GRADE

High Performance FOG and MEMS Accelerometer Combined IMU



	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±900 °/sec	±50 g
Bias in-run stability (Allan)	0.2 °/hr	0.2 mg
Bias repeatability (1σ)	0.2 °/hr	0.2 mg
Noise (Random walk)	0.05 °/√h	0.01 m/sec/√h
Scale factor error	100 ppm	100 ppm
Size	63 x 63 × 53mm	
Weight	350 g	

UF700
TACTICAL GRADE

High Performance FOG and Quartz Flexible Accl Combined IMU

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±800 °/sec	±30 g
Bias in-run stability (Allan)	0.5 °/hr	0.06 mg
Bias repeatability (1σ)	0.5 °/hr	0.06 mg
Noise (Random walk)	0.05 °/√h	0.01 m/sec/√h
Scale factor error	100 ppm	100 ppm
Size	80 x 80 × 60 mm	
Weight	1000 g	

Micro-Magic

Attitude and Positioning Be Everywhere!

麦新敏微

The Leader in China Inertial Sensor Market

+86-18621961329

sales@memsmag.com

#368 Liuhe Rd, Binjiang, Hangzhou, China

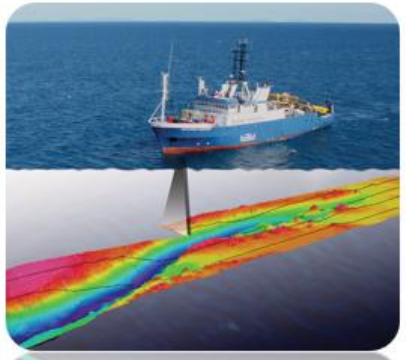
www.memsmag.com

Unmanned Aerial Vehicles

Satellites

Autonomous Vehicles

Remotely Operated Underwater Vehicles



Maritime Echosounder Application

Petroleum Extraction and Exploration