IMU/VRU/AHRS

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U300-A
INDUSTRIAL GRADE

MEMS IMR/VRU/AHRS

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±100 °/sec	±10 /±20 /±40 g
Bias in-run stability (Alan)	5 °/hr	0.05 mg
Bias in-run repeatability (Alan)	5 °/hr	0.12 mg
Noise (Random walk)	0.12 °/√h	0.03 m/sec/ √ h
Scale factor error	0.08 %FS	0.1 %FS

Size	59.6 x 59 x 23.5 mm
Weight	120 g

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U300-B
INDUSTRIAL GRADE

MEMS IMU

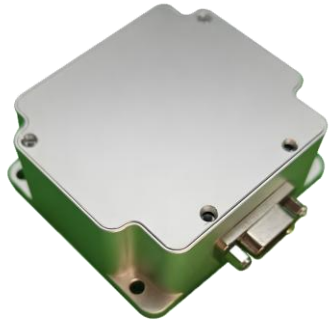
	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	…±125/250/500/1000 °/sec	±3 /6 /12/24 g
Bias in-run stability (Alan)	7 °/hr	0.08 mg
Bias in-run repeatability (Alan)	7 °/hr	0.18 mg
Noise (Random walk)	0.12 °/√h	0.09 m/sec/ √ h
Scale factor error	0.1 %FS	0.1 %FS

Size ..... 22 x22 x 7.4 mm

Weight ..... 7 g

U3000
INDUSTRIAL GRADE

MEMS IMU/VRU/AHRS



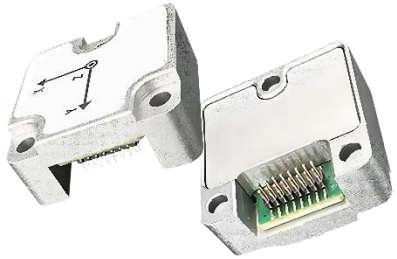
	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±100 °/sec	±10/20/40 g
Bias in-run stability (Alan)	3 °/hr	0.05 mg
Bias in-run repeatability (Alan)	3 °/hr	0.12 mg
Noise (Random walk)	0.09 °/√h	0.03 m/sec/ √ h
Scale factor error	0.08 %FS	0.1 %FS

Size ..... 59.6 x53.4 x 24 mm

Weight ..... 120 g

U3500-A/B/C/D
INDUSTRIAL GRADE

MEMS IMU/VRU/AHRS



	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	….±2000 (adjustable) °/sec	.....±12(adjustable) g
Bias in-run instability (Alan)	.....3~2 °/hr	….....0.03~0.018 mg

Pitch/Roll (Static/Dynamic)…….....0.15~0.2 °/hr
Heading angle drift (Static)…….....0.15~0.2 °/hr
Heading angle drift (Dynamic).....9~5 °/hr
Magnetometer range……..…… ±20Gauss
Barometer range……300-1200hPa
Size .....22 x22 x 10 mm
Weight .....8 g
Connector model ……..……..Molex/Board to board
Interface ……..UART(TTL)/CAN/IO

U3600-A/B/C
INDUSTRIAL GRADE

MEMS IMU/VRU/AHRS

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	….±2000 (adjustable) °/sec	.....±12(adjustable) g
Bias in-run instability (Alan)	.....3~1.6 °/hr	…….0.03~0.018 mg

Pitch/Roll (Static/Dynamic)…….....0.15~0.2 °/hr
Heading angle drift (Static)…….....0.15~0.2 °/hr
Heading angle drift (Dynamic).....9~5 °/hr
Magnetometer range……..…… ±20Gauss
Barometer range……300-1200hPa
Size .....25.7 x24 x 12 mm
Weight .....11 g
Connector model ……...USB
Interface ……USB

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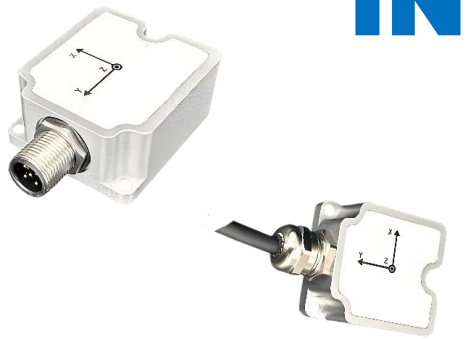
U3700-A/B/C/D
INDUSTRIAL GRADE

MEMS IMU/VRU/AHRS



	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	….±2000 (adjustable) °/sec	.....±12(adjustable) g
Bias in-run instability (Alan)	.....3~1.2 °/hr	…….0.03~0.018 mg

Pitch/Roll (Static/Dynamic)…….....0.15~0.2 °/hr
Heading angle drift (Static)…….....0.15~0.2 °/hr
Heading angle drift (Dynamic).....9~5 °/hr
Magnetometer range……..…….. ±8Gauss
Size .....58.5 x40 x 20 mm
Weight .....75 g
Connector model ……...USB
Interface ……..…UART(RS-232/TTL)/RS485/CAN/USB

U5000
TACTICAL GRADE

MEMS IMU

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±400 °/sec	±30 g
Bias in-run stability (10s, 1σ)	3°/hr	0.1 mg
Bias in-run repeatability (10s, 1σ)	3°/hr	0.1 mg
Noise (Random walk)	0.15 °/√h	0.17 m/sec/ √ h
Scale factor nonlinearity	100ppm	1000ppm

Size	44.8 x38.6 x 21.5 mm
Weight	60 g
Interface	RS232/RS422

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U6300
TACTICAL GRADE

MEMS IMU/VRU/ARHS

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±450 °/sec	±20 g
Bias in-run stability (10s, 1σ)	1°/hr	0.1 mg
Full temp bias in-run stability	5°/hr	0.15 mg
Noise (Random walk)	0.03 °/√h	0.02 m/sec/ √ h
Scale factor nonlinearity	100ppm	100ppm

Size ..... 44.8 x38.6 x 10 mm

Weight ..... 60 g

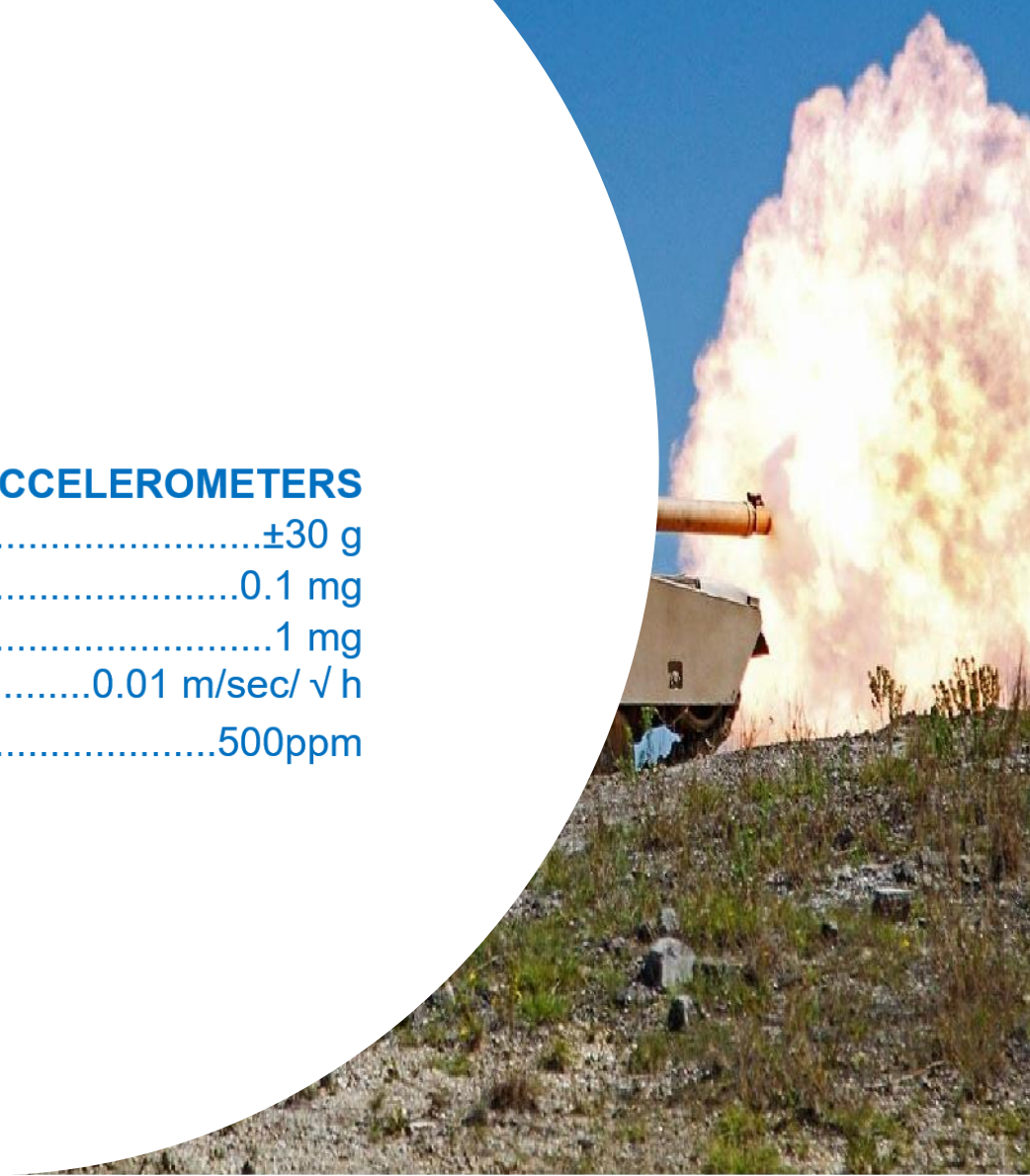
Interface RS422

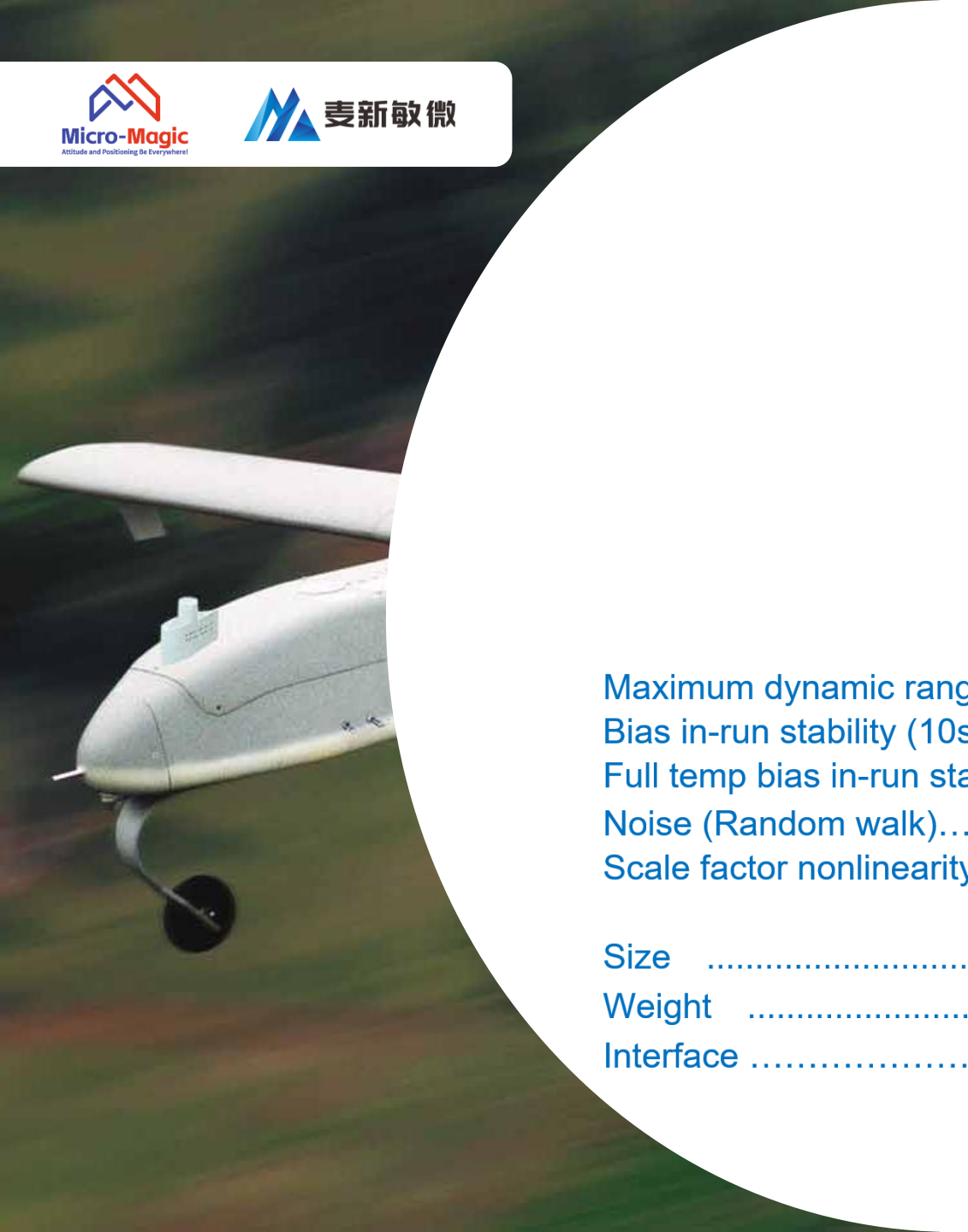
U7000-A/B
TACTICAL GRADE

MEMS IMU/VRU/AHRS

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±400 °/sec	±30 g
Bias in-run stability (10s, 1σ)	0.3~1°/hr	0.1 mg
Full temp bias in-run stability	2~10°/hr	1 mg
Noise (Random walk)	0.02~0.05 °/√h	0.01 m/sec/ √ h
Scale factor nonlinearity	100ppm	500ppm

Size .....44.8 x38.6 x 21.5 mm
Weight .....55 g
Interface RS232/RS422





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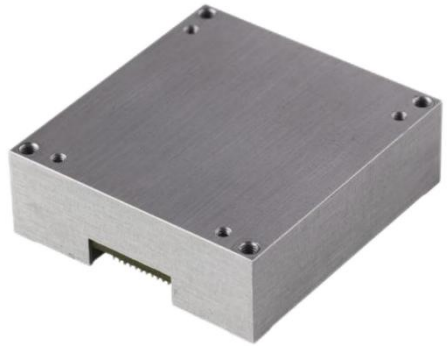
U6488-A/B/C/D
TACTICAL GRADE

MEMS IMU/VRU/AHRS



	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±450 °/sec	±20 g
Bias in-run stability (10s, 1σ)	1~4°/hr	0.1 ~0.5mg
Full temp bias in-run 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 nonlinearity	100ppm	100~200ppm

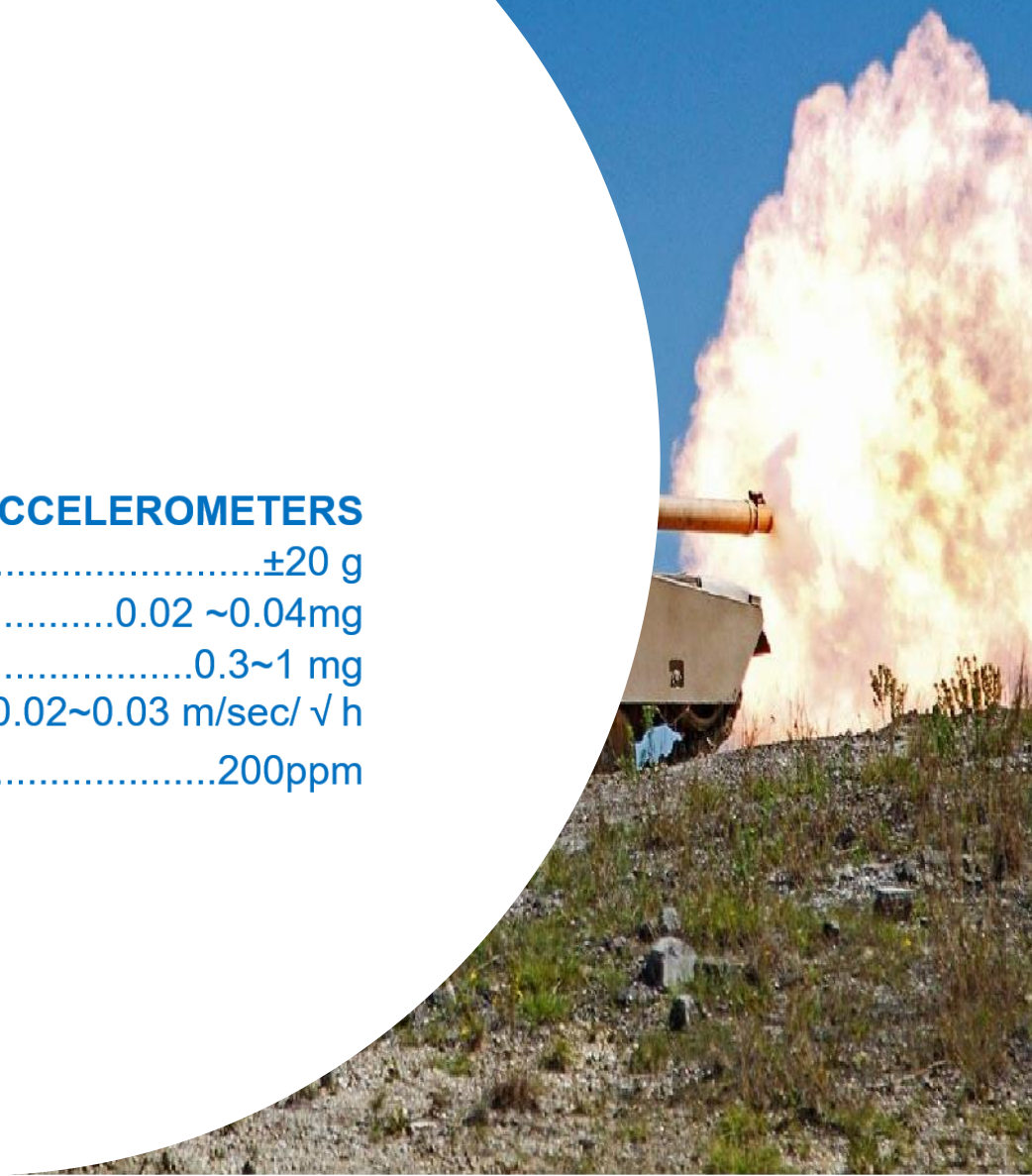
Size .....47 x44 x 14 mm
Weight .....40 g
Interface .....SPI

U16488-A/B/C
TACTICAL GRADE

MEMS IMU/VRU/AHRS

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±500 °/sec	±20 g
Zero bias instability (Allan curve)	0.3~1°/hr	0.02 ~0.04mg
Full temp bias in-run stability	8°/hr	0.3~1 mg
Noise (Random walk)	0.1~0.03 °/√h	0.02~0.03 m/sec/ √ h
Scale factor nonlinearity	200ppm	200ppm

Size	47 x44 x 14 mm
Weight	40 g
Interface	SPI



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UF100A
TACTICAL GRADE

FOG Based IMU

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±300 °/sec	±10 g
Bias in run stability (10s.1σ)	0.2°/hr	0.5mg
Bias in run repeatability (10s.1σ)	0.2°/hr	0.5mg
Noise (Random walk)	0.04 °/√h	0.01 m/sec/ √ h
Scale factor nonlinearity	100ppm	300ppm

Size	φ84.6 x 77.2 mm
Weight	820 g
Interface	RS422

UF300-A/B/C
NAVIGATION GRADE

FOG Based IMU

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±300/1000 °/sec	±10 g
Bias in run stability (10s.1σ)	0.05~0.1°/hr	0.05~0.07mg
Bias in run repeatability (10s.1σ)	0.05~0.1°/hr	0.05~0.07mg
Noise (Random walk)	0.005~0.01 °/√h	0.007m/sec/ √ h
Scale factor nonlinearity	50~60ppm	100~300ppm

Size	145x 125x 122 mm
Weight	1800 g
Interface	RS422

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UF3X80-A/UF3X80-B TACTICAL GRADE

FOG Based IMU

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	±500 °/sec	Can be customerized according to customer's requirement either made by MEMS Accelerometers or by Quartz Accelerometers
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	

UF3X90-A/UF3X90-B TACTICAL GRADE

FOG Based IMU

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

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UF3X100-A/UF3X100-B NAVAIGATION GRADE

FOG Based IMU

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

UF700
TACTICAL GRADE

FOG and MEMS 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	

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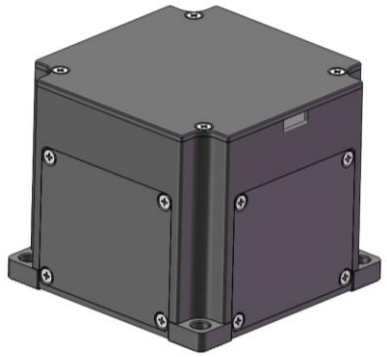
UF600
TACTICAL GRADE

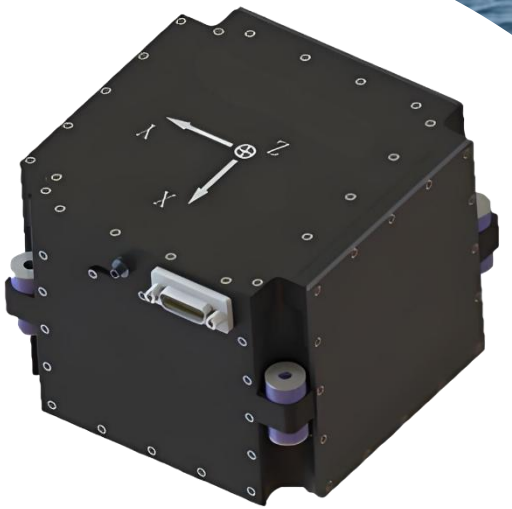
FOG and MEMS Accl Combined IMU



	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	

RU1000
TACTICAL GRADE

RLG Based IMU



	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	1000 °/sec	±30 g
Bias in run stability (10s.1σ)	0.1°/hr	0.05mg
Bias in run repeatability (10s.1σ)	0.1°/hr	0.05mg
Noise (Random walk)	0.02°/√h	0.009m/sec/ √ h
Scale factor nonlinearity	20ppm	50ppm

Size	105x 105x 80 mm
Weight	1400±200g
Interface	RS422

RU2000
NAVIGATIONAL GRADE

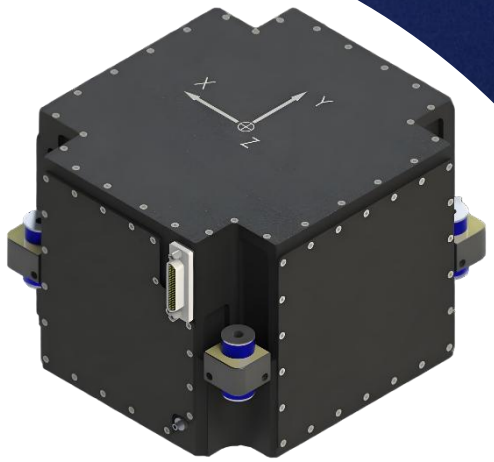
RLG Based IMU

	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	500 °/sec	±30 g
Bias in run stability (10s.1σ)	0.01°/hr	0.03mg
Bias in run repeatability (10s.1σ)	0.008°/hr	0.03mg
Noise (Random walk)	0.002°/√h	0.008m/sec/ √ h
Scale factor nonlinearity	10ppm	30ppm

Size	150x 140x 115 mm
Weight	3300±200g
Interface	RS422

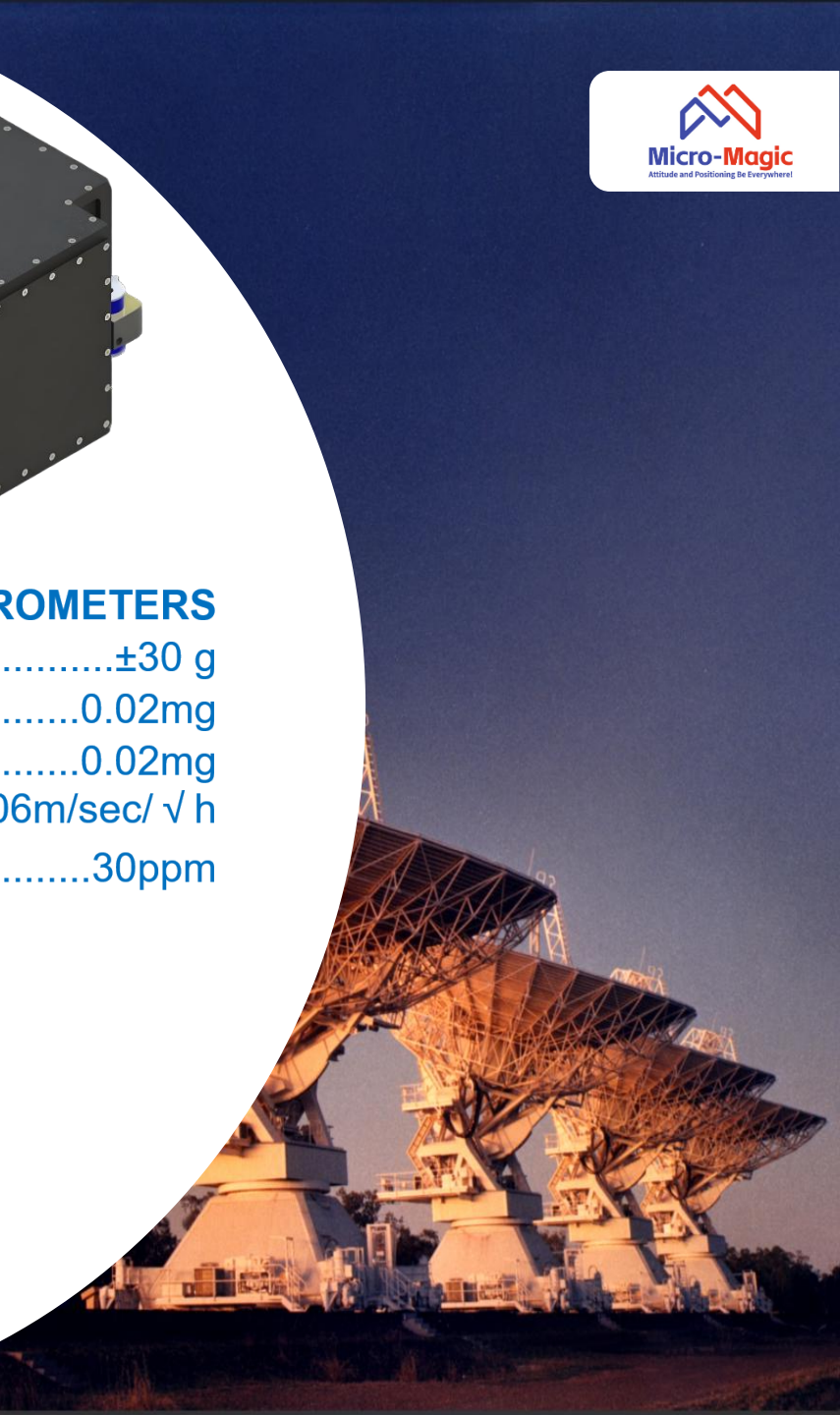
RU3000
NAVIGATIONAL GRADE

RLG Based IMU



	GYROSCOPES	ACCELEROMETERS
Maximum dynamic range	500 °/sec	±30 g
Bias in run stability (10s.1σ)	0.005°/hr	0.02mg
Bias in run repeatability (10s.1σ)	0.0025°/hr	0.02mg
Noise (Random walk)	0.001°/√h	0.006m/sec/ √ h
Scale factor nonlinearity	10ppm	30ppm

Size	160x 150x 115 mm
Weight	3300±200g
Interface	RS422



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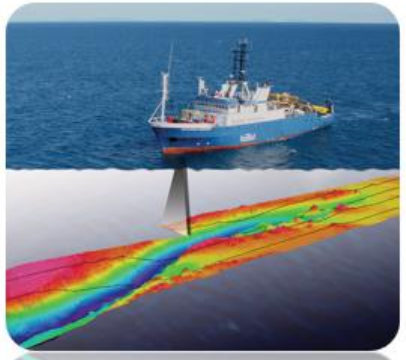

Maritime Echosounder Application

Petroleum Extraction and Exploration