



HIGH PRECISION INERTIAL NAVIGATION SYSTEM



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I6700—A/B/C

TACTICAL GRADE

MEMS Based INS+GNSS Module



Type of IMU.....	MEMS, tactical
GNSS antenna.....	Dual
North seeking accuracy (1σ).....	$\leq 0.5/3^\circ$
Pure inertial location (1σ).....	$\leq 3\text{m}/5\text{m}/10\text{m}/60\text{s}$
Combined heading accuracy (1σ , 2m baseline).....	$\leq 0.1^\circ$
Combined Pitch/Roll accuracy (1σ).....	0.015°
Combined velocity (1σ).....	$\leq 0.1\text{m/s}$
Power supply.....	9~36V
Start time.....	$\leq 2\text{s}$
Operating temperature.....	$-40\sim+80^\circ\text{C}$
Interface.....	RS422/RS232/CAN/Ethernet
Size.....	87*72**56mm
Weight.....	$\leq 370\pm 20\text{g}$





I3500 INDUSTRIAL GRADE

MEMS Based INS+GNSS Module

Types of IMU	MEMS, industrial
GNSS antenna	Single
Heading (single antenna dynamic alignment)	0.2°
Pitch & Roll	0.1°
Position (with GNSS).....	1cm (RTK)
Position (No GNSS Signal,Assisted Odometry).....	1m
Velocity (with GNSS).....	0.03 m/s
Velocity (No GNSS Signal,Assisted Odometry).....	0.1 m/s
Size	75 x 60 x 25 mm
Weight	180g

I3700

INDUSTRIAL GRADE

MEMS Based INS+GNSS Module



Types of IMU	MEMS, industrial
GNSS antenna	Dual
Heading (Dual Antenna ,1m Baseline)	0.2°
Pitch & Roll	0.2°
Position (with GNSS).....	1cm (RTK)
Position (No GNSS Signal,Assisted Odometry).....	1m
Velocity (with GNSS).....	0.03 m/s
Velocity (No GNSS Signal,Assisted Odometry).....	0.1 m/s
Size	75 x 60 x 25 mm
Weight	180g



I3800 INDUSTRIAL GRADE

MEMS Based INS+GNSS OEM Board

Type of IMU.....	MEMS, industrial
GNSS antenna.....	Single/Dual
Heading (Dual antenna, 2m Baseline).....	0.25°
Pitch/Roll (RMS with GNSS).....	0.2°/min
Position (with GNSS).....	0.8cm+1ppm (RTK)
Position (Pure inertial).....	4m (within 1 min)
Velocity (with GNSS).....	0.03m/s
Interface.....	UART/CAN
Size.....	40*30*4mm
Weight.....	9g

I4500-A/B

TACTICAL GRADE

MEMS Based INS+GNSS Module



Type of IMU.....	MEMS, industrial
GNSS antenna.....	Single/Dual
Heading (Single antenna).....	0.2 °
Heading (Dual antenna, 2m Baseline).....	0.1 °
Pitch/Roll (RMS with GNSS).....	0.2~0.1 °/min
Pitch/Roll (RMS without GNSS).....	0.2~0.5 °/min
Position (with GNSS).....	2cm+1ppm (RTK)
Velocity (with GNSS).....	0.1 m/s
Interface.....	UART/PPS/SPI
Size.....	47*44**14mm
Weight.....	50g





I5000 TACTICAL GRADE

MEMS Based INS+GNSS Module

Type of IMU.....	MEMS, tactical
GNSS antenna.....	Single/Dual
Heading (Single antenna with dynamic alignment).....	0.05°
Heading (Dual antenna, 2m Baseline).....	0.05°
Pitch/Roll (RMS with GNSS).....	0.08°/min
Pitch/Roll (RMS pure inertial).....	0.05° (within 1 min)
Position (with GNSS).....	1cm+1ppm (RTK)
Position (Pure inertial).....	5m (within 1 min)
Velocity (with GNSS).....	0.03m/s
Interface.....	RS232/RS422/PPS/CAN
Size.....	60*60*15mm
Weight.....	90g

I6000 TACTICAL GRADE

MEMS Based INS+GNSS Module



Type of IMU.....	MEMS, tactical
GNSS antenna.....	Single/Dual
Heading (Single antenna with dynamic alignment).....	0.1°
Heading (Dual antenna, 2m Baseline).....	0.1°
Pitch/Roll (RMS with GNSS).....	0.1°/min
Pitch/Roll (RMS pure inertial).....	0.02° (within 1 min)
Position (with GNSS).....	1cm+1ppm (RTK)
Position (Pure inertial).....	4m (within 1 min)
Velocity (with GNSS).....	0.03m/s
Interface.....	RS232/PPS/CAN
Size.....	98*94*31mm
Weight.....	310g





IF3000-A/B/C TACTICAL GRADE

FOG Based INS+GNSS Module

Types of IMU	FOG, tactical
GNSS antenna	Single/Dual
Pure inertial north seeking.....	0.3°xsecφ
Heading (single antenna dynamic alignment)	0.05°
Heading (dual-antenna 2-meter baseline)	0.1°
Pitch & Roll (RMS).....	0.05°
Position (single point positioning).....	1.2m
Velocity (with GNSS).....	0.02 m/s
Size	100 x 79 x 70 mm
Weight	800g

IF3500 TACTICAL GRADE

FOG Based INS+GNSS Module



Types of IMU	FOG, tactical
GNSS antenna	Single/Dual
Pure inertial north seeking.....	0.1°xsecφ
Heading (single antenna dynamic alignment)	0.05°
Heading (dual-antenna 2-meter baseline)	0.1°
Pitch & Roll (real-time 1σ).....	0.02°
Pitch & Roll (post-processing 1σ).....	0.01°
Position (single point positioning).....	1.2m
Velocity (with GNSS).....	0.02 m/s
Size	150 x 130 x 135 mm
Weight	3Kg





IF3600-A/B TACTICAL GRADE

FOG Based INS+GNSS Module

Types of IMU	FOG, tactical
GNSS antenna	Single/Dual
Pure inertial north seeking.....	0.1°xsecφ
Heading (single antenna dynamic alignment)	0.02°
Pitch & Roll (1σ).....	0.005°
Position (single point positioning).....	2m
Velocity (with GNSS).....	0.02 m/s
Size	136 x 136 x 150mm
Weight	3.8Kg

IF3700 TACTICAL GRADE

FOG Based INS+GNSS Module



Types of IMU	FOG, tactical
GNSS antenna	Single/Dual
Pure inertial north seeking.....	0.05°xsecφ
Heading (single antenna dynamic alignment)	0.02°
Heading (dual-antenna 2-meter baseline)	0.1°
Pitch & Roll (Pure inertial alignment).....	0.003°(RMS)
Pitch & Roll (with GNSS).....	0.005°
Position (single point positioning).....	1.2m
Velocity (with GNSS).....	0.02 m/s
Size	190 x 190 x 166 mm
Weight	7Kg



IF3900-A/B NAVIGATION GRADE

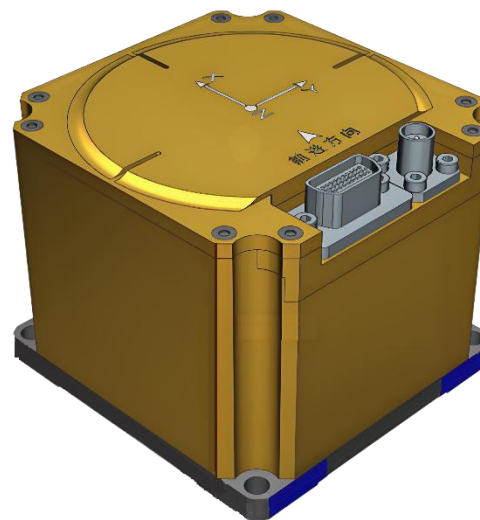
FOG Based INS+GNSS Module

Types of IMU	FOG, tactical
GNSS antenna	Single/Dual
Pure inertial north seeking.....	0.01~0.15°xsecφ
Heading (single antenna dynamic alignment)	0.01~0.015°
Heading (dual-antenna 2-meter baseline)	0.01~0.15°
Pitch & Roll (Pure inertial alignment).....	0.002~0.005°
Pitch & Roll (with GNSS).....	0.002~0.005°
Position (single point positioning).....	1.2~2m
Velocity (with GNSS).....	0.02 m/s
Size	190 x 190 x 166 mm
Weight	8.5Kg

IF4010

TACTICAL GRADE

FOG Based INS+GNSS Module



Type of IMU.....	FOG, industrial
GNSS antenna.....	Single/Dual
Heading (Single antenna).....	0.3 °
Heading (Dual antenna, 2m Baseline).....	0.2 °
Pitch/Roll (RMS with GNSS).....	0.08 °
Pitch/Roll (RMS without GNSS).....	1.0°/hr
Position (with GNSS).....	2cm+1ppm (RTK)
Velocity (with GNSS).....	0.02 m/s
Interface.....	RS422
Size.....	71*68**60mm
Weight.....	520g





IF4030-A/B TACTICAL GRADE

FOG Based INS+GNSS Module

Type of IMU.....	FOG, tactical
GNSS antenna.....	Single/Dual
Heading (pure inertial).....	0.5/0.25°secφ
Pitch/Roll (RMS).....	0.01°/min
Mileage combination (CEP, D:driving mileage).....	≤1%/0.7%D
Position (pure inertial CEP, 1h).....	≤8/4nmil
Velocity (pure inertial).....	5/3 m/s
Velocity (with GNSS).....	≤.0.05 m/s
Interface.....	RS422/RS232/CAN/Ethernet
Size.....	80*80*84mm
Weight.....	860g

IF4050 TACTICAL GRADE

FOG Based INS+GNSS Module



Type of IMU.....	FOG, tactical
GNSS antenna.....	Single/Dual
Heading (pure inertial).....	0.5°secφ
Pitch/Roll (RMS).....	0.02°/min
Mileage combination (CEP, D:driving mileage).....	≤ 1%D
Position (pure inertial CEP, 10min).....	≤ 850m
Velocity (pure inertial).....	8 m/s
Velocity (with GNSS).....	≤ 0.05 m/s
Interface.....	RS422/RS232/CAN/Ethernet
Size.....	80*80*70mm
Weight.....	630g



IF4070 TACTICAL GRADE

FOG Based INS+GNSS Module

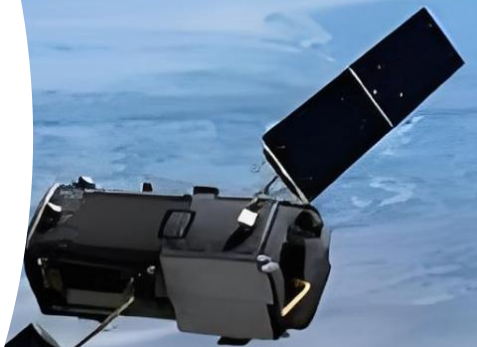
Type of IMU.....	FOG, tactical
GNSS antenna.....	Single/Dual
Heading (pure inertial).....	0.1°sec ϕ
Pitch/Roll (RMS).....	0.01°/min
Mileage combination (CEP, D:driving mileage).....	≤0.5%D
Position (pure inertial CEP, 1hr).....	≤2nmil
Velocity (pure inertial).....	1.5 m/s
Velocity (with GNSS).....	≤0.05 m/s
Interface.....	RS422/RS232/CAN/Ethernet
Size.....	150*120*120mm
Weight.....	2.9Kg

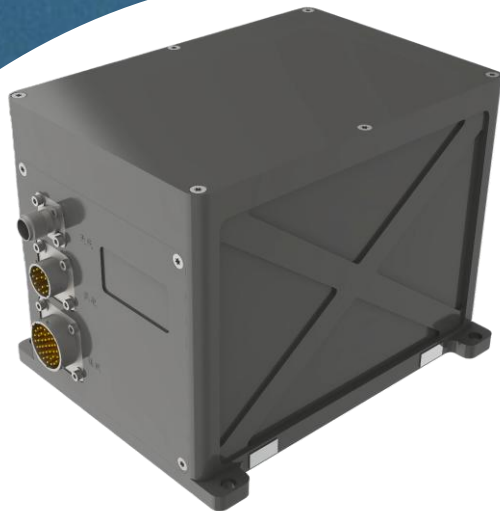
IF5000-A/B TACTICAL GRADE

FOG Based INS+GNSS Module



Type of IMU.....	FOG, tactical
GNSS antenna.....	Single/Dual
Heading (pure inertial).....	0.1/0.05°secφ
Pitch/Roll (RMS).....	0.01°/min
Mileage combination (CEP, D:driving mileage).....	≤0.5/0.15%D
Position (pure inertial CEP, 1hr).....	≤2.5/0.8nmil
Velocity (pure inertial).....	2/1 m/s
Velocity (with GNSS).....	≤.0.05 m/s
Interface.....	RS422/RS232/CAN/Ethernet
Size.....	132*116*119mm
Weight.....	2.6Kg





IF7000 NAVIGATION GRADE

FOG Based INS+GNSS Module

Type of IMU.....	FOG, tactical
GNSS antenna.....	Single/Dual
Heading (pure inertial).....	0.03°secφ
Pitch/Roll (RMS).....	0.01°/min
Mileage combination (CEP, D:driving mileage).....	≤ 1%D
Position (pure inertial CEP, 1hr).....	≤ 0.5nmil
Velocity (pure inertial).....	0.6 m/s
Velocity (with GNSS).....	≤ 0.05 m/s
Interface.....	RS422/RS232/CAN/Ethernet
Size.....	167*116*128mm
Weight.....	4Kg

IF7700

NAVIGATION GRADE

FOG Based INS+GNSS Module



Type of IMU.....	FOG, tactical
GNSS antenna.....	Single/Dual
Heading (pure inertial).....	0.03°secφ
Pitch/Roll (RMS).....	0.01°/min
Mileage combination (CEP, D:driving mileage).....	≤0.1%D
Position (pure inertial CEP, 1hr).....	≤0.5nmil
Velocity (pure inertial).....	0.5 m/s
Velocity (with GNSS).....	≤.0.05 m/s
Interface.....	RS422/RS232/CAN/Ethernet
Size.....	233*194*142mm
Weight.....	8.9Kg



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**Unmanned Aerial
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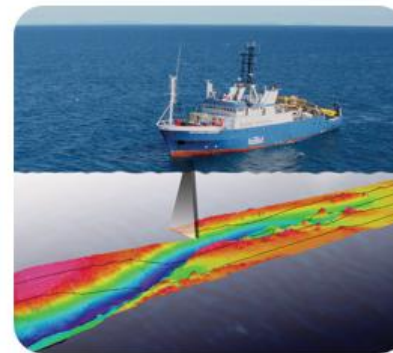
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