# INERTIAL NAVIGATION SYSTEM

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# I3500
# INDUSTRIAL GRADE

## GNSS-Aided Inertial Navigation System


| | |
|---|---|
| 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 |

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# I3700
# INDUSTRIAL GRADE

## GNSS-Aided Inertial Navigation System

| | |
|---|---|
| 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 |

# I4500-A/B
# TACTICAL GRADE

## GNSS-Aided Inertial Navigation System

| | |
|---|---|
| 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 |

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# IF3000-A/B/C TACTICAL GRADE

## GNSS-Aided Inertial Navigation System

| | |
|---|---|
| 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

## GNSS-Aided Inertial Navigation System

| | |
|---|---|
| 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 |

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# IF3600-A/B
# TACTICAL GRADE

## GNSS-Aided Inertial Navigation System

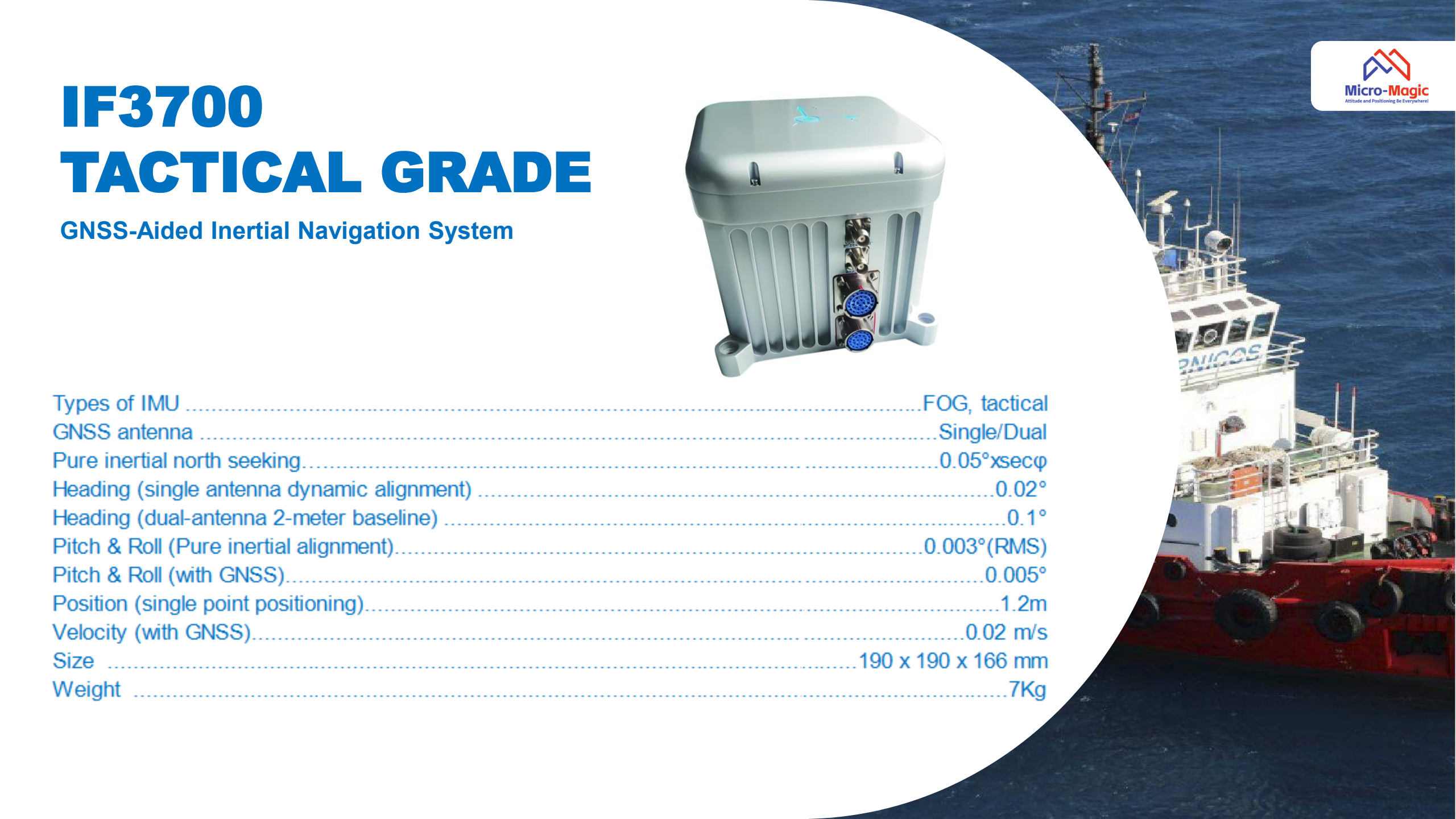
| | |
|---|---|
| Types of IMU | FOG, tactical |
| GNSS antenna | Single/Dual |
| Pure inertial north seeking | 0.1°xsecφ |
| Heading (single antenna dynamic alignment) | 0.02° |
| Pitch & Roll (1σ) | 0.005° |
| Position (single point positioning) | 2m |
| Velocity (with GNSS) | 0.02 m/s |
| Size | 136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

# IF3700
# TACTICAL GRADE

## GNSS-Aided Inertial Navigation System



| | |
|---|---|
| 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 |



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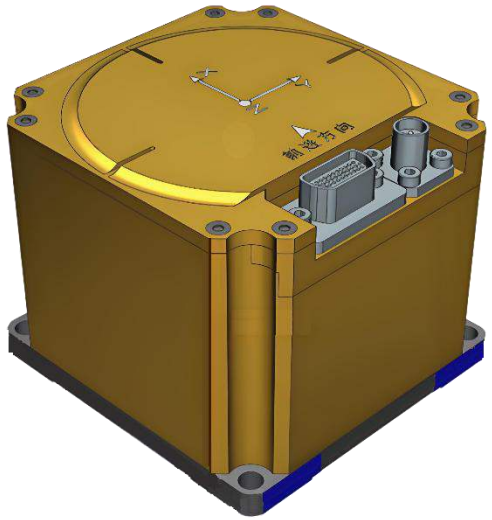
# IF3900-A/B
# NAVIGATION GRADE

## GNSS-Aided Inertial Navigation System

| | |
|---|---|
| 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

## GNSS-Aided Inertial Navigation System



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

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# IR1000
# TACTICAL GRADE

## Inertial Navigation System

| | |
|---|---|
| Type of IMU | RLG, tactical |
| Pure inertial location | ≤8nm/hr |
| Heading accuracy | 0.4°secφ |
| Heading range | 0~360 ° |
| Pitch/Roll accuracy | 0.02 ° |
| Pitch range | ±90° |
| Roll range | ±180° |
| Start time | ≤8s |
| Operating temperature | -40~+60°C |
| Interface | RS422/RS232/RS485 |
| Size | 105*105**80mm |
| Weight | 1.4±0.2Kg |

# IR2000
# NAVIGATIONAL GRADE

## Inertial Navigation System


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| | |
|---|---|
| Type of IMU | RLG, navigational |
| Pure inertial location | ≤0.8nm/hr (CEP50) |
| Heading accuracy | 0.04°secφ |
| Heading range | 0~360 ° |
| Pitch/Roll accuracy | 0.01 ° |
| Pitch range | ±90° |
| Roll range | ±180° |
| Start time | ≤8s |
| Operating temperature | -40~+60°C |
| Interface | RS422/RS232 |
| Size | 150*140**115mm |
| Weight | 3.3±0.2Kg |

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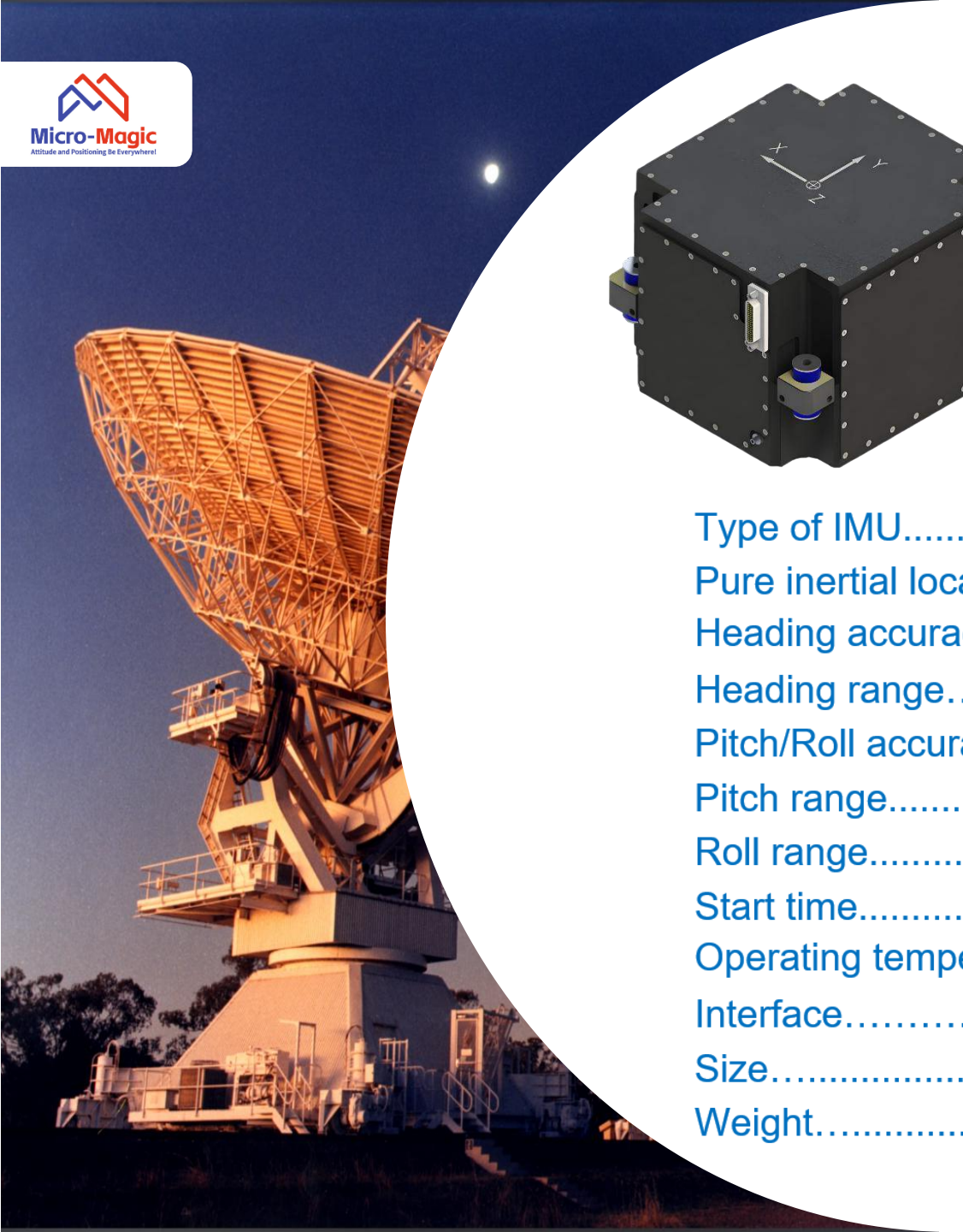


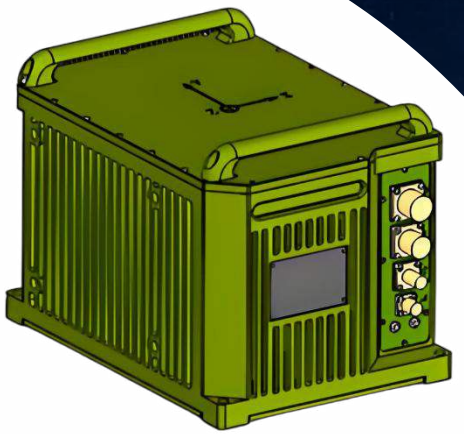

# IR3000
# NAVIGATIONAL GRADE

## Inertial Navigation System

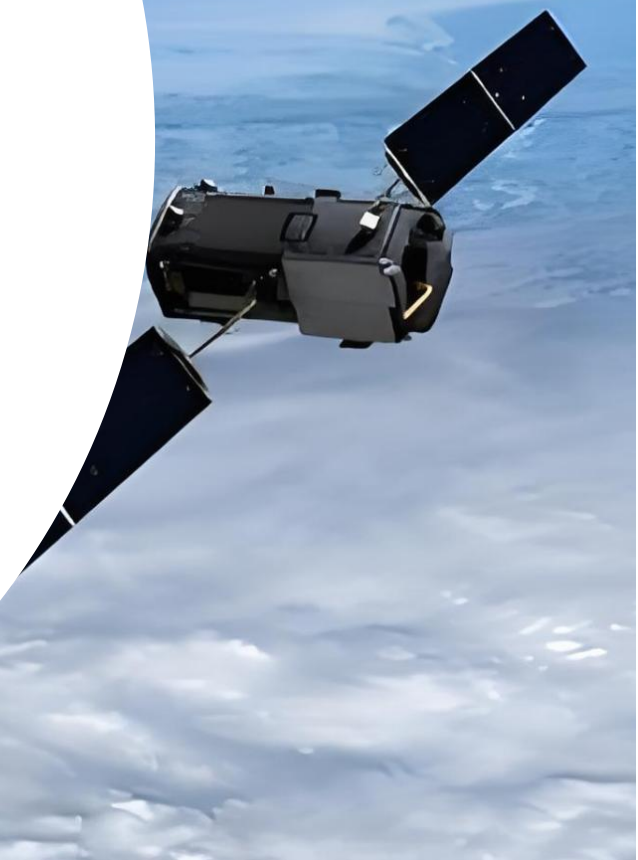
| | |
|---|---|
| Type of IMU | RLG, navigational |
| Pure inertial location | ≤0.4nm/hr (CEP50) |
| Heading accuracy | 0.02°secφ |
| Heading range | 0~360 ° |
| Pitch/Roll accuracy | 0.01 ° |
| Pitch range | ±90° |
| Roll range | ±180° |
| Start time | ≤8s |
| Operating temperature | -40~+60°C |
| Interface | RS422/RS232 |
| Size | 160*150**115mm |
| Weight | 3.3±0.2Kg |

# IR5000
# NAVIGATIONAL GRADE

## Inertial Navigation System



| | |
|---|---|
| Type of IMU | RLG, navigational |
| Pure inertial location | ≤2nm/24hr (CEP) |
| Heading accuracy | 0.025°secφ |
| Heading range | 0~360 ° |
| Pitch/Roll accuracy | 0.02 ° |
| Pitch range | ±90° |
| Roll range | ±180° |
| Start time | ≤10s |
| Operating temperature | -40~+55°C |
| Interface | RS422/RS232/CAN/Ethernet |
| Size | 334*236**242mm |
| Weight | ≤23Kg |



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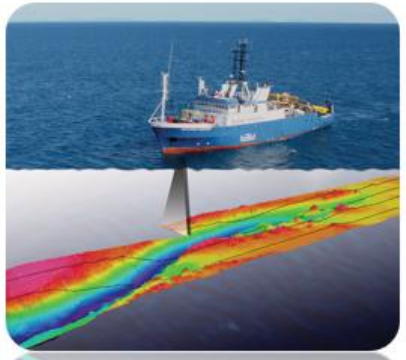

Maritime Echosounder Application

Petroleum Extraction and Exploration