

Technical specifications

| | Parameter | ER-MIMU-03 |
|---|----------------------------------|--------------------------------------|
| Gyro Performance | Range | ±300°/s(Extendable,±100°/s~±5000°/s) |
| | Bias Stability | ≤10°/h |
| | Bias repeatability | ≤10°/h |
| | Bias Instability(Allan Variance) | ≤2°/h |
| | Angular Random Walk | ≤0.15°/h |
| | Scale Factor Nonlinearity | ≤300ppm |
| | Scale Factor repeatability | ≤200ppm |
| | Sensitive Axis Misalignment(RMS) | 0.5mrad |
| Accelerometer Performance | Range | ±15g (Extendable,±2g~±200°/s) |
| | Bias Stability | 0.5mg |
| | Bias repeatability | 0.5mg |
| | Scale Factor Nonlinearity | ≤500ppm |
| | Scale Factor repeatability | ≤300ppm |
| | Sensitive Axis Misalignment | 0.5mrad |
| System Performance | Weight | ≤250g |
| | Size | 70mm×54mm×39mm |
| | Supply Voltage | 11~12V, Voltageclamp>15v |
| | Supply Consumption | ≤1.5w |
| | Interface | RS422 |
| | Data Rate | 400Hz |
| | Bandwidth | Extendable,5~480Hz, Typ:60Hz |
| | Vibration Level | 10grms(10~2000Hz) |
| | Shock Resistance | 5000g |
| | Operate Temp | -45 °C ~ + 85 °C |
| | Storage Temp | -55 °C ~ + 105 °C |
| All values typical at +25,+12Vdc unless otherwise statement | | |



Applications

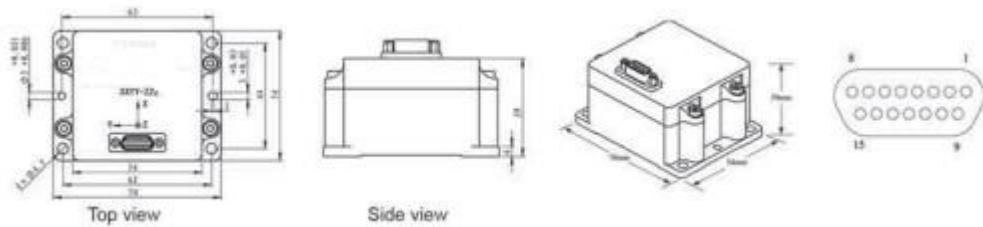
Integrated Navigation Systems & Inertial Guidance System

Flight Control & Guidance System

Attitude Heading Reference Systems(AHRS)

Stabilization of Antennas, Cameras & Platforms

Structure(unit:mm)



| | | |
|-----|--------|-----------------------------------|
| 1 | VCC | Power(+12v) |
| 2 | GND | Power Ground |
| 3 | R1+ | RS422 Positive Input(interface1) |
| 4 | R1- | RS422 Negative Input(interface1) |
| 5 | T1- | RS422 Negative Output(interface1) |
| 6 | T1+ | RS422 Positive Output(interface1) |
| 7 | GND1 | RS422 Ground(interface1) |
| 8-9 | NC | No Connection |
| 10 | R2* | RS422 Negative Output(interface2) |
| 11 | R2- | RS422 Negative Output(interface2) |
| 12 | T2- | RS422 Positive Output(interface2) |
| 13 | T* | RS422 Positive Output(interface2) |
| 14 | GND2 | RS422 Ground(interface2) |
| 15 | Shield | Shield Ground |