

# AGNC coremicro<sup>®</sup> AHRs/INS Unit Specification

GSA Contract Number: GS-24F-0014K

SIN Number: 602-22

AGNC-coremicro-UNCU

Universal Navigation and Control Unit



| PARAMETER                  | SPECIFICATION   |
|----------------------------|---|
| Pitch, Roll, Heading Range | $\pm 90^\circ, \pm 180^\circ, 0^\circ$ to $360^\circ$   |
| Supply                     | 8-16 VDC  |
| Supply Current at 25°C     | 0.3A (max), 0.15A (typical)   |
| Power Consumption          | 3.6W (max), 1.8W (typical)  |
| Output Signal Latency      | 16 mS   |
| Digital Output             | RS-232; Binary and ASCII (NMEA 0183 standard sentences and AGNC proprietary sentences) format |
| Analog Output              | (per customer's specification)  |
| Angular Rate               | $\pm 300^\circ/\text{sec.}$   |
| acceleration               | $\pm 18g$   |
| Operating Temperature      | $-40^\circ$ to $70^\circ$ C   |
| Storage Temperature        | $-40^\circ$ to $100^\circ$ C  |

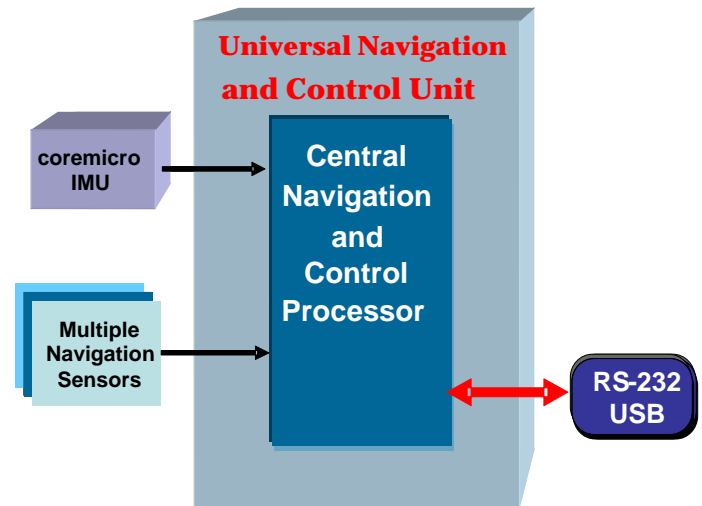


## coremicro AHRs/INS OUTPUT PARAMETERS

| Parameter | Data Type | Units                      |
|-----------|-----------|----------------------------|
| Time      | Float     | Seconds                    |
| Rate X    | Float     | Degrees/Second             |
| Rate Y    | Float     | Degrees/Second             |
| Rate Z    | Float     | Degrees/Second             |
| Accel X   | Float     | Meters/Second <sup>2</sup> |
| Accel Y   | Float     | Meters/Second <sup>2</sup> |
| Accel Z   | Float     | Meters/Second <sup>2</sup> |
| Pitch     | Float     | Degrees                    |
| Roll      | Float     | Degrees                    |
| Heading   | Float     | Degrees                    |

## coremicro INS OUTPUT PARAMETERS

|                    |        |                       |
|--------------------|--------|-----------------------|
| Latitude           | Double | Degrees               |
| Longitude          | Double | Degrees               |
| Altitude           | Float  | Meters from Sea Level |
| Velocity X (North) | Float  | Meters/Second         |
| Velocity Y (East)  | Float  | Meters/Second         |
| Velocity Z (Down)  | Float  | Meters/Second         |



\* PC Based Software for User Calibration and Test

\* Accepts Signals from odometer and/or pedometer

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