

Command and Control Hardware | The Rugged Interface Unit (RIU)

NAVIGATION UNIT FOR GATOR®

RIU

The Rugged Interface Unit (RIU) is the latest Navigation Unit from ION for use with Gator.

It is the successor to the Gator USB Interface (GUSBI). The RIU is designed to be used in a confined high exposure environment and makes use of robust hardware interfacing techniques proven in the higher capacity PowerRTNU family.



KEY FEATURES

- Rugged enclosure , IP65 rated - rugged, portable, fanless, sealed and capable of being quickly fastened to a bulkhead or deck of a very small craft
- Cool running onboard Xilinx Spartan-6 FPGA contains Microblaze 'soft' processor running main triggering application
- USB 2.0 Interface to host Gator workstation
- 4 serial ports - S1 & S2 fixed RS232, S3 & S4 selectable for RS232 or RS422/RS485/NMEA 0183
- 2 output triggers - selectable TTL active HI/LO or relay NO/NC
- 2 input triggers - selectable active HI/LO
- Dedicated buzzer output, relay contact or +12VDC. All input & output connectors are locking IP67 rated Fischer
- Data activity LEDs are sunlight readable IP67 rated and located on rear panel for serial data, triggers, buzzer & processor heartbeat
- Power input is 9 to 36V DC
- External universal input AC-DC. Power Supply and sealed cable set supplied with each unit
- CE Mark, FCC Mark & RoHS compliant
- GPS clock delivering accurate time and standalone GPS position to initiate navigation calculation
- GPS clock 'holdover' mode keeps good time for approximately 24 hours during GPS signal outage





Dimensions & Power

Dimensions	W190 x D220 x H90mm (2U High)
Weight	3 Kg
Power Input	9 to 36V DC Power
Power Dissipation	Max 12W, Typ < 1.0A @ 12V DC , < 0.5A @ 24V DC

Environmental

Operating Temperature	0 °C to + 55 °C
Storage Temperature	-40 °C to +80 °C
Operating Humidity (NC)*	5% to 85%
Storage Humidity (NC)*	5% to 95%
*Non-condensing	

EMC Compliance and Electrical Safety

Electromagnetic Compatibility, Generic Emission Standard Part 6-4	EN61000-6-4:2007 +A1:2011
Electromagnetic Compatibility, Generic Immunity Standard Part 6-2	EN61000-6-2:2005
Electromagnetic Compatibility, Electrical and Electronic Installations in Ships	IEC 60533:1999
Electrical Safety Assessment, Low Voltage Directive Testing LVDT	EN60950-1:2006 +A2:2013

ION has been delivering innovative solutions to the energy industry for over 50 years, and is the leading provider of real-time, multi-vessel positioning and control systems. For further information contact cs1-sales@iongeo.com

About ION

ION is a technology leader with a strong history of innovation. Leveraging innovative technologies, ION creates value through data capture, analysis and optimization to enhance companies' critical decision-making abilities and returns. Our offerings are focused on improving E&P decision-making, enhancing reservoir management and optimizing offshore operations.