

HIGH PERFORMANCE REAL TIME NAVIGATION UNIT

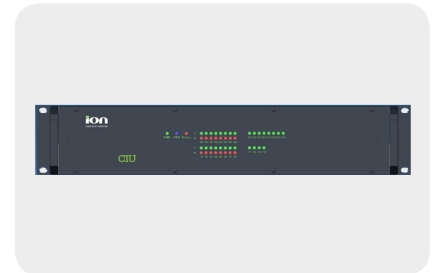
Communications Interface Unit

CIU is the latest high performance, real-time navigation unit from ION for use with Orca® and Gator™ command and control systems. With its robust hardware and software; enhanced diagnostics and compatibility with external operating systems including Linux, the CIU is the industry leading command and control hardware.



MAIN FEATURES OF THE CIU

- Rugged fanless enclosure designed for offshore survey environment, 2U 19" rack or desktop mounting
- Embedded Linux Host Controller
- 10/100/1000 BaseT auto-negotiating Ethernet port connection to navigation network
- Secondary 10/100/1000 BaseT auto-negotiating Ethernet port
- Interfacing to ~ 300 sensors and headers
- Embedded NTP Server (Stratum 1) synchronised by onboard GNSS receiver
- 16 serial ports, software selectable for RS232, RS422 or RS485
- 8 output triggers - software selectable for TTL (Active Hi/Lo) or RELAY (Normally Open/Normally Closed)
- 4 input triggers - software selectable for TTL (Active Hi/Lo) or RELAY (Normally Open/Normally Closed)
- GNSS clock delivering accurate time and standalone GNSS position to initiate navigation calculation
- GNSS clock 'holdover' mode keeps good time for approximately 24 hours during GNSS signal outage
- All input and output connectors on rear panel
- Data activity & status LED indicators on rear panel, also repeated on front panel
- External universal input AC-DC power supply
- RoHS compliant. CE Mark & FCC Mark pending
- Trigger timing accuracy to better than 25 μ s
- GNSS Timing Engine (GTE) - Xilinx Spartan 6 FPGA with Microblaze 'soft' processor used to manage all triggers
- 1PPS or any trigger input available by configuration on any trigger output





Dimensions & Power

Dimensions	480mm x 460mm x 90mm (2U High)
Weight	8Kg
Power Supply	External Universal Input 90 - 264 VAC (47 - 63Hz) AC-DC, Output 12.0V DC @ 7.5A Max
Power Dissipation Maximum	90W (< 0.4A @ 220V AC, <0.8A @ 110V AC)

Environmental

Operating Temperature	0°C to + 45 °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 (Pending)
Electromagnetic Compatibility, Generic Immunity Standard Part 6-2	EN61000-6-2:2005 (Pending)
Electrical Safety Assessment, Low Voltage directive Testing LVDT	EN60950-1:2006 +A2:2013 (Pending)

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 csi-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.