







## RIU

# Rockets Interface Unit P/N 60100009

The RIU is a rugged digital controller designed to support rocket launchers such as M260 and M261. The RIU can be adapted to multiple solutions for a wide array of avionics applications where rapid implementation, easy integration and high performance along with low weight and volume are required.

As an advanced avionics Line Replaceable Unit (LRU), the RIU can be adapted to provide interfaces for a variety of applications on aerial vehicles. The RIU's rugged construction allows for safe operation in the hard environment associated with its location in the weapon pylons.

## **Typical applications**

- Next generation RIU.
- Capable to control two rocket launchers at the same time.
- Single and dual channel units are available.

#### **Standard interfaces**

The RIU communicates via dual redundant MIL-STD-1553B serial communication. The I/O configuration can be tailored to customer's specific application and requirements.

### **Performance highlights**

- Stringent armament safety per MIL-STD-882.
- Complete Built-In-Test (BIT).
- Low power consumption (less than 10W).
- Low weight, modular and flexible design.

#### **Technical Specifications**

- Qualification......MIL-STD-810F
- EMI/RFI.....MIL-STD-461E
- Power Supply per .....MIL-STD-704A

### **Growth potential**

- The RIU can be adapted to RGIU which can replace two legacy units - RIU and EU on helicopters and aircraft.
- Capable to control two rocket launchers or two guns or one rocket launcher and one gun at the same time.
- Store and weapon release.



#### **About Niron Systems & Projects**

Niron Systems & Projects is a recognized provider of sophisticated technological solutions for defense and Homeland Security applications.

With many years of accumulated experience backing a strong command of the most advanced modern technologies, company engineers specialize in the development and production of integrated solutions for a variety of manned and unmanned airborne, ground and surface naval platforms. These include control systems for weapon delivery and chaff & flare Dispensing Systems: mission and communication computers: display and switching units; hardware and software solutions for real-time systems.

The company also provides unique turnkey project management and ongoing customer support services for non-standard technological programs requiring close professional accompaniment.

Niron Systems & Projects is certified to: ISO 9001:2008 and ISO90003:2004

Characteristic	Performance
Power supply	MIL-STD-704A Category B
Protection	<ul> <li>Over and under voltage protection</li> <li>Polarity reversal protection</li> <li>Over current protection</li> <li>Normal operation during power interrupts for durations up to 50msec</li> </ul>
Functional	<ul> <li>Automatic inventory check</li> <li>Fuze setting for each rocket separately</li> <li>Computerized fire mechanism</li> <li>Extensive BIT: PBIT, IBIT, CBIT</li> <li>Two rocket launchers support</li> <li>Support for emergency mode without external communication</li> </ul>
Environmental (MIL-STD-810F) Qualified to:	<ul> <li>Operating Temperature: - 40°C to + 55°C</li> <li>Non-operating Temperature: - 54°C to + 71°C</li> <li>Humidity: 95% @ +30°C to + 55°C</li> <li>Mechanical shock (operation): 20g for duration of 11±1ms</li> <li>Mechanical shock (Crash safety) at 40G</li> <li>Acceleration</li> <li>Explosive atmosphere</li> <li>Gun fire</li> <li>Random vibrations</li> <li>Sand and Dust</li> <li>Fungus</li> </ul>
EMI/RFI (MIL-STD-461E) Qualified to:	<ul> <li>CE102, CS101, CS114, CS115, CS116, RE102, RS101, RS103</li> <li>Lightning Protection - RTCA/DO-160E, Sec 22, Cat A3J33</li> </ul>
Reliability (prediction)	15,000 hours at 35°C
Dimension	10.5" X 6.25" X 4.5" (L x W X H inches).
Weight	6lb.

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