



**intellegre**<sup>TM</sup>  
BETTER INTELLIGENT<sup>®</sup>

## Orientation Sensor by intellegre<sup>TM</sup> – Specification

(Subject to change)

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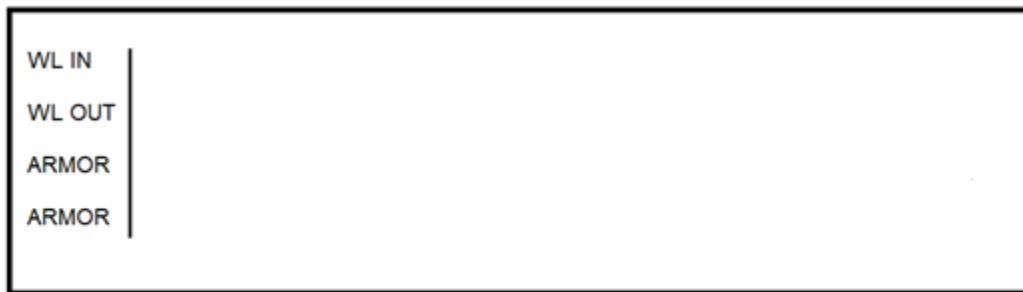
## 1.0 PCB Specifications

### 1.1 Environmental Rating

Description	Rating
<b>Operating Temperature Range</b>	-20 °F (-29 °C) to 350 °F (177 °C)
<b>Non-powered Maximum Temperature</b>	-58 °F (-50 °C) to 392 °F (200 °C)
<b>Max Thermal Change</b>	9°F (5 °C) / Minute
<b>Mechanical Shock Compliance</b>	Compliant to all hollow carrier gun systems
<b>Vibration (3 axis)</b>	10 g RMS @ Sweep Frequency 50-2500 Hz

### 1.2 Mechanical Specification

PCB dimensions are 2.5" X 4".



dimension 4" X 2.5" wide.

### 1.3 Electrical Specification

Description	Rating
<b>Operating Voltage Range</b>	-18 VDC to -600 VDC (negative)
<b>Operating Current– Standby</b>	7mA
<b>Communication Current</b>	Per chosen Telemetry (25ma)
<b>Minimum Cable Head Volage</b>	22V
<b>Orientation Accuracy</b>	+ / - 10 degrees
<b>Temperature Accuracy</b>	+ / - 1 degree C
<b>Orientation Accuracy</b>	+ / - 50 psi (dependent upon pressure sensor)
<b>Strain Gauge (future)</b>	Future – TBD
<b>Communication Time Frame</b>	All times except during motor operation. Device must be powered Off and then On before initiating another sequence.

### 1.4 Compatibility

Description	Rating
<b>Detonators – Hot Wire</b>	50 ohms or higher (single or double resistor types)
<b>Igniters – Setting Tools</b>	50 ohms or higher
<b>RF Safe Detonators</b>	PX-1/EBW, RED (all versions), Exploding Foil Initiators
<b>Megger Tester</b>	<b>Incompatible</b>

The product will work with All Detonators and Addressable Switch systems.

## 2.0 Uni Orientation, Pressure, Temperature PCB Features

- Positive Voltage pass through
- Re-usable; cartridge type system eases modules replacement at end of life.
- Up/Down Communication provides surface with status for every command sequence
- Cartridge replacement recommended every 100 runs.

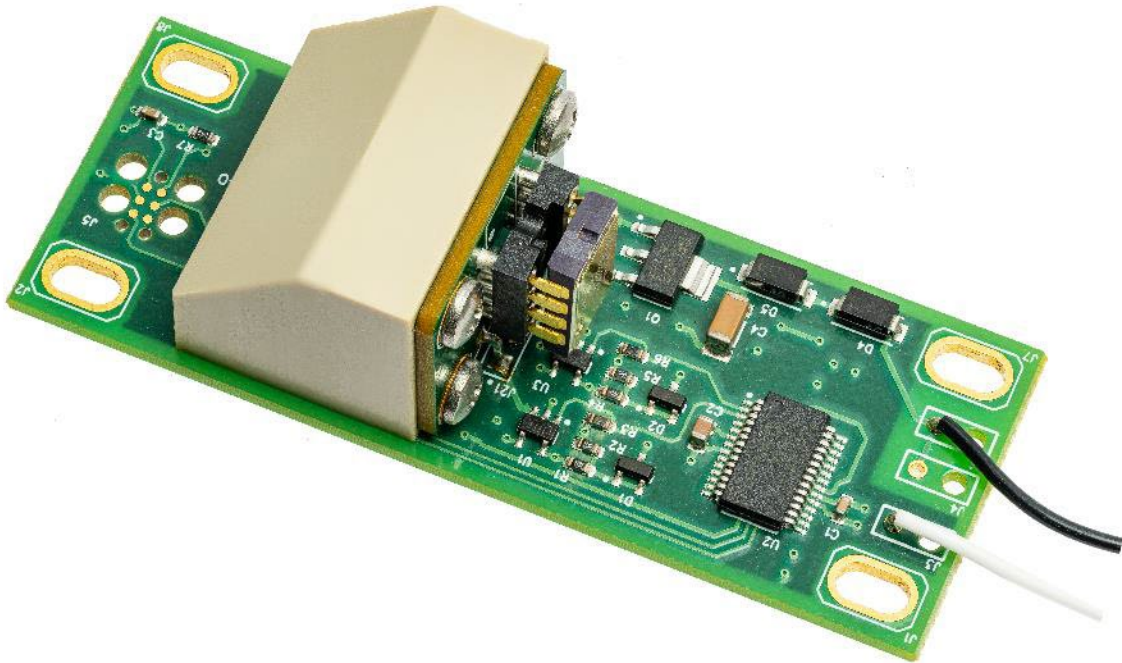


FIGURE 1