















effectiveness and performance. Qualified as a drop-in replacement in the STORM program,

Introducing TargetPoint DMC 600,

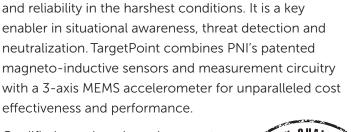
STORM-qualified digital magnetic compass — an ideal replacement for

the first US-made, American-supported,

PNI's TargetPoint DMC 600 delivers unbeatable accuracy

TargetPoint is an ideal choice for far target locators and laser range finders that require real-world reliability and performance.

existing DMCs.







## Same specs. Made and supported in the USA.

TargetPoint provides the same performance as non-US DMCs, and is a drop-in replacement in the STORM-mLRF. The TargetPoint DMC module is extensively tested to military standards, including weapon-shock, to ensure specifications are consistently met.

## From an established US small business with a proven record.

PNI Sensor Corporation has been a reliable supplier of compass modules to the military market for over 20 years.

## **Performance Specifications**<sup>1</sup>

3 axes.  Mechanical Characteristics		•	
Angular Resolution  Magnetic Field Calibrated Range  I/O Characteristics  Data Interface  RS 232 subset (CMOS-level)  Communication Protocol  Reporting  Continuous Measurement Rate  Single Measurement  Power Requirements  Supply Voltage  Average Current Draw @ 10 Hz  Environmental Testing  Operating  -40°C to +70°C per MIL-STD-810G, Method 501.5 and 502.5  Storage (non-operational)  -57°C to +85°C per MIL-STD-810G, Methods 501.5 and 502.5  Temp. Shock (non-operational)  -57°C to +71°C. 15°C/minute. Stabilized for 75 minutes at extremes. 3 cycles.  Shock (non-operational)  MIL-STD-810G, Method 514.5, Procedure I − General Vibration. Random vibration per Annex C − Figure 514.5C-17, with duration of ≥ 1 hour on each of 3 axes.  Mechanical Characteristics  Dimensions (L x W x H)  1.30° x 1.22° x 0.53° (33 x 31 x 13.5 mm)  Max Weight	Azimuth (Heading) Accuracy		± 0.5° rms
Magnetic Field Calibrated Range  I/O Characteristics  Data Interface  RS 232 subset (CMOS-level)  Communication Protocol  Reporting Rate Single Measurement Single Measurement  Power Requirements  Supply Voltage  A-75 to 5.25 VDC  Average Current Draw @ 10 Hz  Environmental Testing  Operating -40°C to +70°C per MIL-STD-810G, Method 501.5 and 502.5  Storage (non-operational) -57°C to +85°C per MIL-STD-810G, Methods 501.5 and 502.5  Temp. Shock (non-operational) -57°C to +71°C. 15°C/minute. Stabilized for 75 minutes at extremes. 3 cycles.  Shock (non-operational)  Vibration (non-operational)  MIL-STD-810G, Method 514.5, Procedure I — General Vibration. Random vibration per Annex C — Figure 514.5C-17, with duration of ≥ 1 hour on each of 3 axes.  Mechanical Characteristics  Dimensions (L x W x H)  1.30° x 1.22° x 0.53° (33 x 31 x 13.5 mm)  Max Weight	Elevation (Pitch) & Bank (Roll) Accuracy		± 0.2° rms
I/O Characteristics  Data Interface RS 232 subset (CMOS-level)  Communication Protocol ASCII  Reporting Continuous Measurement 1, 2, 5, 10, and 20 Hz  Rate Single Measurement 10 Hz maximum  Power Requirements  Supply Voltage 4.75 to 5.25 VDC  Average Current Draw @ 10 Hz 225 mW max.  Environmental Testing  Operating -40°C to +70°C per MIL-STD-810G, Method 501.5 and 502.5  Storage (non-operational) -57°C to +85°C per MIL-STD-810G, Methods 501.5 and 502.5  Temp. Shock (non-operational) -57°C to +71°C. 15°C/minute. Stabilized for 75 minutes at extremes. 3 cycles.  Shock (non-operational)  Vibration (non-operational)  Vibration (non-operational)  MIL-STD-810G, Method 514.5, Procedure I - General Vibration. Random vibration per Annex C -Figure 514.5C-17, with duration of ≥ 1 hour on each of 3 axes.  Mechanical Characteristics  Dimensions (L x W x H)  1.30" x 1.22" x 0.53" (33 x 31 x 13.5 mm)  Max Weight  Divided Characteristics  Naccious ASCII  ASCII	Angular Resolution		0.01°
Data Interface  Communication Protocol  Reporting  Continuous Measurement  1, 2, 5, 10, and 20 Hz  Rate  Single Measurement  10 Hz maximum  Power Requirements  Supply Voltage  Average Current Draw @ 10 Hz  Environmental Testing  Operating  -40°C to +70°C per MIL-STD-810G, Method 501.5 and 502.5  Storage (non-operational)  -57°C to +85°C per MIL-STD-810G, Methods 501.5 and 502.5  Temp. Shock (non-operational)  -57°C to +71°C. 15°C/minute. Stabilized for 75 minutes at extremes. 3 cycles.  Shock (non-operational)  Vibration (non-operational)  MIL-STD-810G, Method 514.5, Procedure I — General Vibration. Random vibration per Annex C —Figure 514.5C-17, with duration of ≥ 1 hour on each of 3 axes.  Mechanical Characteristics  Dimensions (L x W x H)  Max Weight  1, 2, 5, 10, and 20 Hz  ASCII  ASTORA 205.5  ASCIO  ASCII  ASCII  ASCII  ASCII  ASCII  ASCII  ASTD-810G, Method 501.5 and 502.5  Ascional 502.5  Mechanical Characteristics  Dimensions (L x W x H)  1.30° x 1.22° x 0.53° (33 x 31 x 13.5 mm)  Max Weight	Magnetic Field Calibrated Range		± 150 μT
Communication Protocol  Reporting Continuous Measurement 1, 2, 5, 10, and 20 Hz Rate Single Measurement 10 Hz maximum  Power Requirements  Supply Voltage 4.75 to 5.25 VDC  Average Current Draw @ 10 Hz 225 mW max.  Environmental Testing  Operating  -40°C to +70°C per MIL-STD-810G, Method 501.5 and 502.5  Storage (non-operational)  -57°C to +85°C per MIL-STD-810G, Methods 501.5 and 502.5  Temp. Shock (non-operational)  -57°C to +71°C. 15°C/minute. Stabilized for 75 minutes at extremes. 3 cycles.  Shock (non-operational)  Vibration (non-operational)  MIL-STD-810G, Method 514.5, Procedure I — General Vibration. Random vibration per Annex C —Figure 514.5C-17, with duration of ≥ 1 hour on each of 3 axes.  Mechanical Characteristics  Dimensions (L x W x H)  Max Weight  1.30" x 1.22" x 0.53" (33 x 31 x 13.5 mm)  Max Weight	I/O Characte	eristics	
Reporting Rate Single Measurement 1, 2, 5, 10, and 20 Hz  Single Measurement 10 Hz maximum  Power Requirements  Supply Voltage 4.75 to 5.25 VDC  Average Current Draw @ 10 Hz 225 mW max.  Environmental Testing  Operating -40°C to +70°C per MIL-STD-810G, Method 501.5 and 502.5  Storage (non-operational) -57°C to +85°C per MIL-STD-810G, Methods 501.5 and 502.5  Temp. Shock (non-operational) -57°C to +71°C. 15°C/minute. Stabilized for 75 minutes at extremes. 3 cycles.  Shock (non-operational) 5000 shots while mounted in STORM rangefinder system on M4 rifle  Vibration (non-operational) MIL-STD-810G, Method 514.5, Procedure I — General Vibration. Random vibration per Annex C —Figure 514.5C-17, with duration of ≥ 1 hour on each of 3 axes.  Mechanical Characteristics  Dimensions (L x W x H) 1.30" x 1.22" x 0.53" (33 x 31 x 13.5 mm)  Max Weight 20 gm	Data Interface		RS 232 subset (CMOS-level)
Rate Single Measurement 10 Hz maximum  Power Requirements  Supply Voltage 4.75 to 5.25 VDC  Average Current Draw @ 10 Hz 225 mW max.  Environmental Testing  Operating -40°C to +70°C per MIL-STD-810G, Method 501.5 and 502.5  Storage (non-operational) -57°C to +85°C per MIL-STD-810G, Methods 501.5 and 502.5  Temp. Shock (non-operational) -57°C to +71°C. 15°C/minute. Stabilized for 75 minutes at extremes. 3 cycles.  Shock (non-operational)  Shock (non-operational)  MIL-STD-810G, Method 514.5, Procedure I — General Vibration. Random vibration per Annex C — Figure 514.5C-17, with duration of ≥ 1 hour on each of 3 axes.  Mechanical Characteristics  Dimensions (L x W x H)  1.30" x 1.22" x 0.53" (33 x 31 x 13.5 mm)  Max Weight	Communication Protocol		ASCII
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Supply Voltage  Average Current Draw @ 10 Hz  Environmental Testing  Operating  -40°C to +70°C per MIL-STD-810G, Method 501.5 and 502.5  Storage (non-operational)  -57°C to +85°C per MIL-STD-810G, Methods 501.5 and 502.5  Temp. Shock (non-operational)  -57°C to +71°C. 15°C/minute. Stabilized for 75 minutes at extremes. 3 cycles.  Shock (non-operational)  Shock (non-operational)  MIL-STD-810G, Method 514.5, Procedure I — General Vibration. Random vibration per Annex C —Figure 514.5C-17, with duration of ≥ 1 hour on each of 3 axes.  Mechanical Characteristics  Dimensions (L x W x H)  Max Weight  1.30" x 1.22" x 0.53" (33 x 31 x 13.5 mm)  Max Weight	Rate	Single Measurement	10 Hz maximum
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Operating -40°C to +70°C per MIL-STD-810G, Method 501.5 and 502.5  Storage (non-operational) -57°C to +85°C per MIL-STD-810G, Methods 501.5 and 502.5  Temp. Shock (non-operational) -57°C to +71°C. 15°C/minute. Stabilized for 75 minutes at extremes. 3 cycles.  Shock (non-operational)  5000 shots while mounted in STORM rangefinder system on M4 rifle  Vibration (non-operational)  MIL-STD-810G, Method 514.5, Procedure I — General Vibration. Random vibration per Annex C —Figure 514.5C-17, with duration of ≥ 1 hour on each of 3 axes.  Mechanical Characteristics  Dimensions (L x W x H)  1.30" x 1.22" x 0.53" (33 x 31 x 13.5 mm)  Max Weight  20 gm	Average Current Draw @ 10 Hz		225 mW max.
Storage (non-operational) Temperature  Storage (non-operational)  -57° C to +85° C per MIL-STD-810G, Methods 501.5 and 502.5  Temp. Shock (non-operational)  -57° C to +71° C. 15° C/minute. Stabilized for 75 minutes at extremes. 3 cycles.  Shock (non-operational)  5000 shots while mounted in STORM rangefinder system on M4 rifle  Vibration (non-operational)  MIL-STD-810G, Method 514.5, Procedure I — General Vibration. Random vibration per Annex C — Figure 514.5C-17, with duration of ≥ 1 hour on each of 3 axes.  Mechanical Characteristics  Dimensions (L x W x H)  1.30" x 1.22" x 0.53" (33 x 31 x 13.5 mm)  Max Weight  20 gm	Environmen	tal Testing	
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rangefinder system on M4 rifle  Vibration (non-operational)  MIL-STD-810G, Method 514.5, Procedure I — General Vibration. Random vibration per Annex C — Figure 514.5C-17, with duration of $\geq$ 1 hour on each of 3 axes.  Mechanical Characteristics  Dimensions (L x W x H)  1.30" x 1.22" x 0.53" (33 x 31 x 13.5 mm)  Max Weight		-57°C to +71°C. 15°C/r	
$\begin{array}{c} \text{dure I} - \text{General Vibration. Random} \\ \text{vibration per Annex C} - \text{Figure 514.5C-} \\ 17, \text{ with duration of } \geq 1 \text{ hour on each of } \\ 3 \text{ axes.} \\ \\ \text{Mechanical Characteristics} \\ \\ \text{Dimensions (L x W x H)} \\ \text{Max Weight} \\ \end{array}$	Shock (non-operational)		
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Max Weight 20 gm	Mechanical (	Characteristics	
	Dimensions (L x W x H)		1.30" x 1.22" x 0.53" (33 x 31 x 13.5 mm)
	Max Weight		20 gm
		tions	

For ordering information and most current specifications, please visit www.pnicorp.com



1. Specifications are preliminary and subject to change.

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3 - A X I S



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MODULE

## PNI SENSOR CORPORATION

is an established, successful leader in magnetometer technology, serving such clients as the US military and GM, Chrysler and Ford in the automotive industry. PNI's team of physicists, engineers and researchers has unparalleled expertise in creating the highest performance magnetic sensor on the market. PNI applies this patented magnetometer technology to create highly accuracte, reliable and low power compass modules.

Many of today's leading companies are using PNI technology in their marquee products and across a wide spectrum of applications, inlcuding robotics, targeting, surveying, and oceanography.

