


ULTI
SENSE.

DMC-pico

Datasheet



Highly shock
and vibration
resistant

The DMC-pico is an ultra-compact and shock-proof digital magnetic compass that is perfect for weapon and for handheld applications. It enhances your sensor system with highly reliable and accurate north finding for a minimal trade-off in space, weight and energy consumption.

Each DMC-pico goes through an extensive and individual calibration process. A unique factory compensation with quality feedback combined with embedded user compensation software enables outstanding heading determination over a wide range of operational conditions. It has been designed to withstand harsh environmental conditions such as those in small arms fire control applications. Its sophisticated software and construction allows a flexible and efficient integration.

With “System State Compensation”, integrators can improve their system azimuth accuracy under complex internal hard magnetic influences without costly design modifications.

PRODUCT HIGHLIGHTS

Small and lightweight

Weapon shock resistant

Low power consumption

0.25° azimuth accuracy

Easy system integration

System State Compensation (optional)

User programmable line of sight

CE certified

APPLICATIONS

Weapon mounts

Handheld systems

Land vehicles

UAVs/UGVs

Remote weapon stations

DMC-PICO

TECHNICAL DATA

HEADING

Accuracy (within elevation/bank range of -45deg to +45deg)	±0.25 deg (1 σ)
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ELEVATION / BANK (pitch/roll)

Accuracy	±0.1deg (1 σ)
Calibrated range	-180 deg to +180 deg
Functional range	-180 deg to +180 deg

ELECTRICAL PROPERTIES

Power supply	3.15 V to 5.25 V
Power consumption operational mode	180 mW

COMMUNICATION INTERFACE

Serial interface type	UART and SPI
Connector type	Samtec SS4

MEASUREMENT CHARACTERISTICS

Measurement rate (selectable)	0.042 Hz to 50 Hz
Start-up time	50 ms
Start-up time with System State Compensation	100 ms

MECHANICAL PROPERTIES

Housing	Aluminium
Weight	9 g
Dimensions (L x W x H)	31 x 23 x 8.5 mm

ENVIRONMENTAL PERFORMANCE

Operating temperature range	-40° C to +71° C
Storage temperature range	-40° C to +85° C
Functional shock (half sine)	50 g / 11 ms
Weapon shock (half sine)	2,000 g / 0.5 ms
Vibration (random 5 Hz to 2,000 Hz)	7.7 g RMS

Technical parameters in this document are typical values unless otherwise specified.

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