

# 5000 Series

**Specially designed to improve ballistic fire control accuracy or CBRN detection on small/medium compact armored vehicles.**

IRDAM 5000 meteorological sensor is a powerful digital instrument measuring local real time environmental conditions.

Combat-proven 5000 sensors are the result of over 40 years IRDAM's experience on battlefield worldwide.

Its patented operating principle with no moving part makes it highly reliable and perfectly adapted to military environments: vibrations, shocks, dust and water.

This high precision meteorological sensor responds quickly to wind variations and measures the slightest breath. The measurements provided by the sensor are transmitted through a single digital frame on EIA-422 serial link. A single shielded cable connected to the unit supplies power to operate the sensor and provides data.

IRDAM sensors are fully certified for the most stringent military standards and have received the « Swiss Made » label.

They do not require any particular maintenance.

Replacement filters kits are available for easy decontamination procedures.

IRDAM sensors can receive (optional) an electronic compass indicating wind direction and vehicle direction towards geographical North.

IRDAM sensor can be combined with external temperature digital sensor TEMPEX (ground, ammunition storage room...)

IRDAM guarantees a 25 years lifetime and operability of the 5000 series.

## • Key features

- Dedicated to small/medium compact armored vehicles.
- Patented « Thermal Field Variation » technology unsensitive to harshest environment.
- 100 % tested equipment with individual test report.
- Easy to install and designed to avoid improper use and electrical overstress.
- Very low maintenance required.



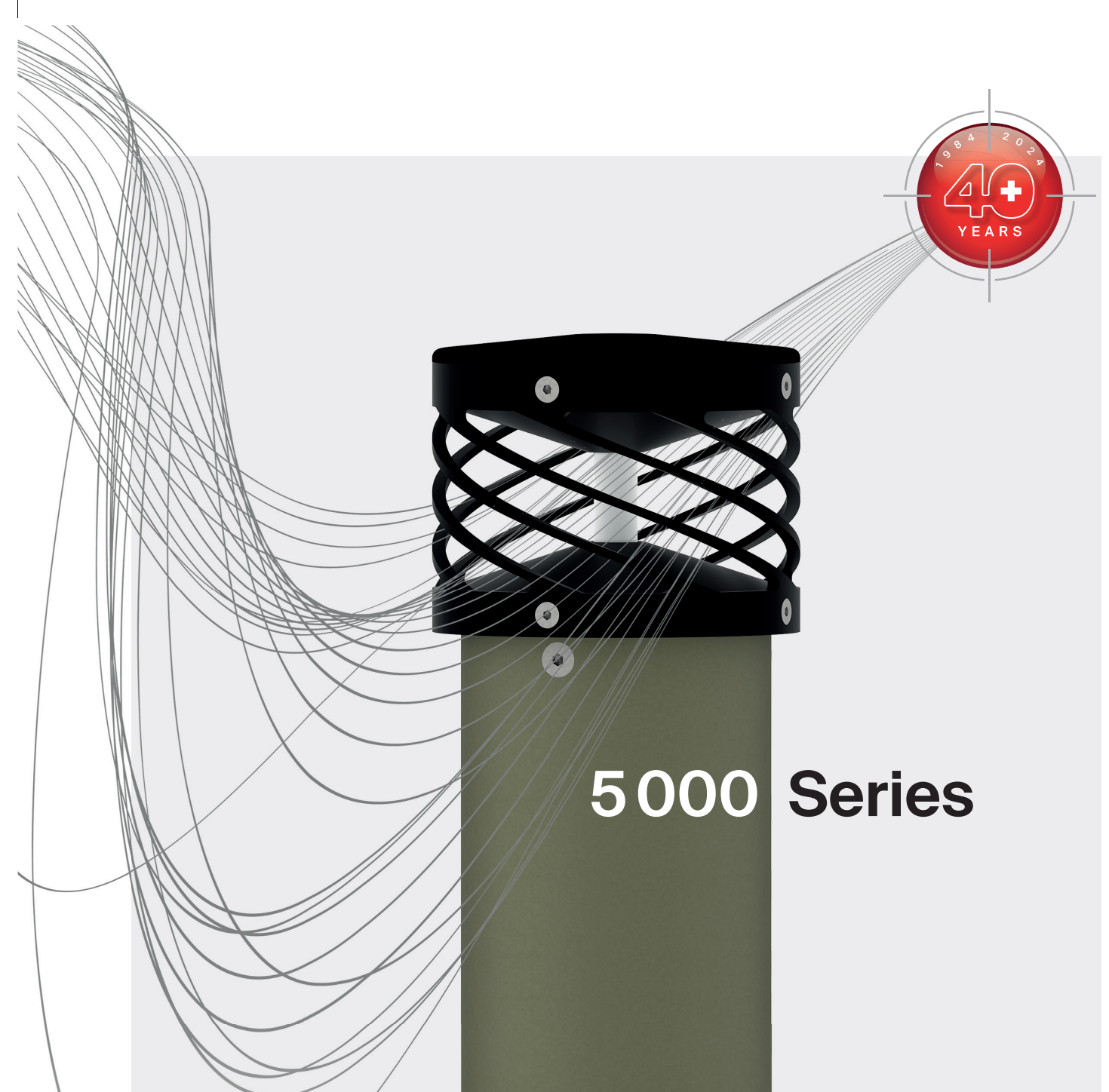
## Global presence



Your local contact

**IRDAM<sup>+</sup>**  
improve your precision

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**5000 Series**

## Military Automatic Weather Sensor

IRDAM 5000 weather sensor is a powerful digital instrument measuring local real time environmental condition.

**Specially designed to improve ballistics fire control accuracy and/or CBRN detection on small/medium compact armored vehicles.**



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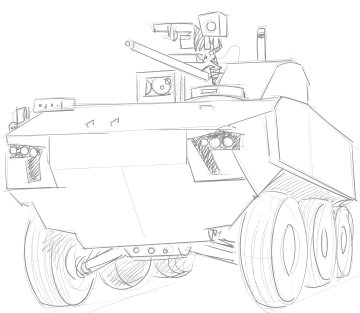
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5 000 Series

improve your precision



Measurements specification

Wind Speed

Range	0 - 40 m/s
Accuracy	± (0.5 m/s + 5 %)
Resolution	1/16 m/s

Wind Direction

Azimuth	0 - 360 °
Accuracy (1)	± 5 °
Resolution	1/16 °

Air Temperature

Range	- 40 °C - + 70 °C
Accuracy (1)	± 1 °C
Resolution	1/16 °C

Absolute Atmospheric Pressure

Range	600 - 1110 hPa (mbar)
Accuracy	± 5 hPa (mbar)
Resolution	1/16 hPa (mbar)

Optional: Direction of the station to magnetic North

Azimuth	0 - 360°
Accuracy	± 5°
Resolution	1/16°

Optional: Relative humidity

Range	0 % - 100 % RH
Accuracy (1)	± 4 % RH (0 % - 100 %)
Resolution	1/16 % RH

Optional: GPS Localization

Latitude	90° N - 90° S
Longitude	180° E - 180° W
Accuracy	variable
Resolution	1/512 min

(1) @ Wind Speed > 0.5 m/s

Technical specification

Data transmission	EIA - 422 / EIA - 485
Transmission cycle	6 per second

Input voltage	18 - 32 VDC
Consumption	< 25 W
Consumption (zero wind)	< 5 W

Autotest	Permanent
Start up	< 60 s

Operating temperature	-40 °C - + 70 °C
Storage temperature	-45 °C - + 85 °C

Size

Height (B, H)	323 mm
Height (HCGPSE)	338 mm
Diameter	85 mm
Base	Ø117 mm
Weight	<2.5 kg

Options

Ground or ammunition storage	
room temperature sensor	TEMPEX
Replacement filter kit	KITNBC 6 056

Optional: PAINT system

Chemical agent resistant	
coating system	MIL - DTL - 53 072 E
Pre-treatment	MIL - DTL - 5 541 F
Primer	MIL - DTL - 530 022 E
Top coat	MIL - DTL - 530 039 E

Patented product

Certification specification

MIL-STD 461G: electromagnetic compatibility

- CE102: Basic curve CE102.1
- CS101: Curve #2 all applications
- RE102: Curve RE102-4, Navy Mobile& Army
- RS103: 30 MHz to 1GHz Ships above deck, Ground Army and Navy
- RS103: 1GHz to 18GHz Ground Army and Navy
- CS114: Curve CS114-1, ships above deck, Ground Army and Navy
- CS115: Signal figure CS115-1, Level: 5A, all application
- CS116: Pulse CS116-1 and Level CS116-2, all application

MIL - STD - 1275 E: environmental conditions

- All conditions

MIL - STD 810 H: environmental conditions

- Low pressure (altitude) 500.6: <-40 °C; < 572 hPa
- High temperature storage 501.7 Proc 1: >+71 °C; >2 h
- Low temperature storage 502.7 Proc 1: <-46 °C; >72 h
- High temperature operation 501.7 Proc 2: >+64 °C; >2 h
- Low temperature operation 502.7 Proc 2: <-40 °C; >2 h
- Temperature shock 503.7 Proc I-B: -40 °C, +71 °C, -40 °C; >2 h
- Humidity 507.6 Proc II: 10x 60 to 30 °C @ 95% RH; 24 h
- Immersion 512.6: T water+27 °C, 2 h; water 1 m, 0.5 h
- Salt fog 509.7: 35 °C, 48 h, 5 % NaCl, 48 h drying
- Blowing dust 510.7: 23 °C, +71 °C, 8.9 m/s, 10.6 g/m³
- Vibration 514.8: Cat.24 Fig. 514.8 E-1,7.7 g RMS
- Shocks 516.8: Tab.516.8-3 Fig.516.8-3, 40 g 11 ms

IEC EN 60000: Environmental testing

- Protect again water jet (IP) 60 529:2001: 100 l/min, 3 m, IP X6
- Electrostatic discharges 61000 -4 - 2: 8 kV contact, 15 kV air

VG 95373, VG 95370: electromagnetic compatibility (B model)

- Conducted susceptibility 95 373 -14 LF07G, 95 373 -24 Limits class 2
- impulse susceptibility 95 373 -14 LF03G, 95 373 -24, ± 100V @ 5 Ω
- Radiated emission 95 373 -12 SA04G, 95 373 -22 Limits Line 2
- Radiated emission 95 370 -16 SA06S, 95 370 -26 Limits Line 2
- Conducted emission 95 373 -10 LA01G, 95 373 -20 Limits Line 2

