

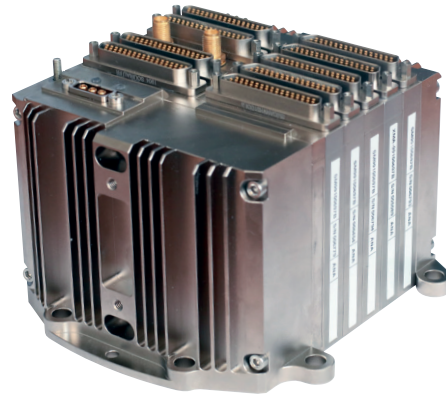
PRELIMINARY

DATA SYSTEMS



# HeimSpin

## Full Wireless Modular Acquisition System for Rotating Parts



INSTRUMENTATION & TESTING

The Safran Data Systems **HeimSpin** proposes high performance HeimStrong module technology built in a **mechanical housing dedicated to rotating parts instrumentation**.

The HeimSpin replaces legacy slip ring technology offering a **full wireless/contactless link between the rotor and the stator**. Power is transferred via inductive coupling. Acquired data, health monitoring information, configuration data and synchronization signals are transferred over a bi-directional radio link.

The HeimSpin, as a standard HeimStrong stack, is scalable and can host **from 2 to 16 wireless modules** of various kinds: analog, digital, discrete, video.

The HeimSpin is designed to cope with very severe environmental conditions.

Designed to operate seamlessly with existing test systems, the HeimSpin is configured and managed as a standard HeimStrong stack and is fully compatible with Safran Data Systems architecture.



Automotive



Rotating Machinery



Marine Applications



Energy: wind, solar, turbine



Railway



Heavy Industry



Aerospace



Defense



R&D Centers



Test House

### FULLY WIRELESS

No slip ring, low intrusive and maintenance-free technology

### SCALABLE

Up to 120 strain gages or accelerometers, or 240 temperatures or any combinations

### HIGH ACCURACY

Low uncertainty down to 200ppm  
Typical and high synchronization lower than 100ns

### EASY TO CONFIGURE

Configured and managed remotely by the eZ Software Suite

### DESIGNED FOR HARSH ENVIRONMENTS

Built to sustain up to 2500 rpm without additional bracket

### HIGH EFFICIENCY INDUCTIVE POWERING

Low EMI pollution and permanent health monitoring

## TECHNICAL SPECIFICATIONS

The HeimSpin is a standard stack that can host from 2 to 16 modules.

### MECHANICAL CHARACTERISTICS (for the 9-acquisition module unit displayed here)

Dimensions .....	127 mm x 126 mm x 88 mm
Weight .....	2 kg
Mounting .....	8 x M6 screws
Max. Power .....	100 W

### INTERFACE

Power Supply ..... Induction

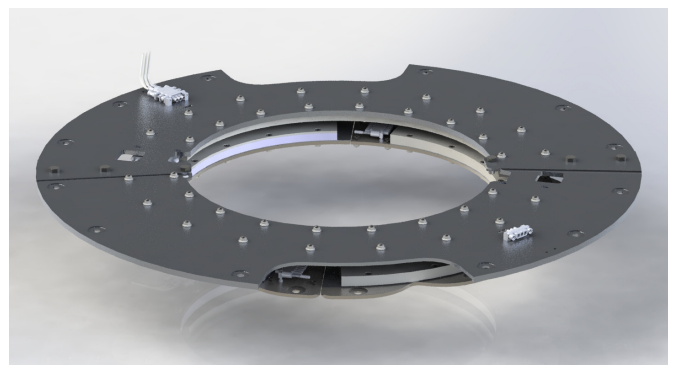
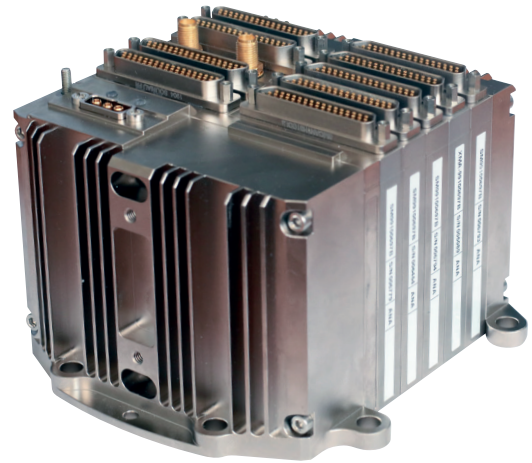
#### Applications modules

Any module from the XMA catalog, in particular:

XMA-ANA .....	8 Universal Analog ch.
XMA-ABC .....	8 Quarter/Half Bridge ch.
XMA-THC .....	8 Thermocouple ch.
XMA-HDA .....	16 Single/Diff Analog ch.
XMA-VDA .....	2 SD-Video + 2 audio ch.
XMA-RSD .....	4 RS-X – 16 Discrete ch.

### ENVIRONMENTAL CONDITIONS

Temperature Operating .....	-40°C to +85°C
Humidity .....	MILSTD810G (507.5)
Vibrations .....	IEC 60068-2-64, MIL-STD-810 G, Table 514.6D-III – Category 14
Shock .....	DO160G – sec ADU – Cat. D : 6g/20ms 3 shocks per axis
Crash safety .....	DO160G – Sect7 – Cat D : 20g/20ms shocks
Rotation .....	2500rpm
Watertightness .....	DO 160G Section 10 Cat R : spray test...
EMC	
• CS DO160G – Section 20 Cat R 30mA	
• RA DO160G – Section 20 Cat R 0.1-0.4 GHz: 20V/m	
• RP DO160G – Section 20 Cat R 0.4-8GHz: 150V/m	
• Power Voltage spike DO160G – Section 17 Cat A	
• RF Emission DO160G – Section 21 Cat P extended	
Altitude .....	25,000 ft
Decompression .....	8000ft to 25000ft in 15s



#### GLOBAL SALES

5, Avenue des Andes - CS 90101 - 91978 Courtaboeuf Cedex - FRANCE - Tel.: +33 1 69 82 78 00 - Email: sales.sdsy@safrangroup.com

#### USA

3005 Business Park Dr - Norcross, GA 30071 - USA - Tel.: +1 770 753 4017 - Email: sales@SafranDataSystemsUS.com