



Rolls-Royce

UNIVERS Telemetry System

... making information work for you



Full service support offered . . .

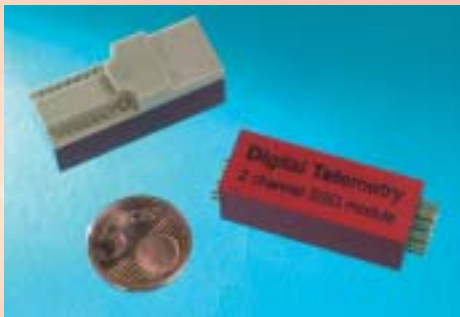
In addition to the standard telemetry modules for direct usage with thermocouples, strain gauges and measuring of voltages we can offer you individual applications to provide the solution for your specific measurement requirements.

Our service covers everything from the specification, the application of telemetry and sensor technology, calibration of the complete measurement system to the test execution and the subsequent data analysis.

Fully digital system
ensures
high transmission
signal quality

UNIVERS - Uninterruptable Inductive powered Radiotelemetry System

... competitive and reliable



Transmitter

The Rolls-Royce telemetry system was developed to measure physical parameters of rotating components of aircraft engines. Our telemetry modules are capable of recording pressures, temperatures, torque and vibrations including contact-free transmission to the ground station.

The data transfer and data processing is fully digital using up to 8 channels per telemetry module with very high transmission accuracy and an excellent signal-to-noise distance. The slim size of the module (14.2x14.2x38mm) allows a flexible and customer oriented application of the telemetry system in every kind of vehicle.

The system design compliments the high standard of aircraft engines production and has a proven durability at environmental temperatures from -20°C up to 120°C and can withstand loads up to 50,000G.

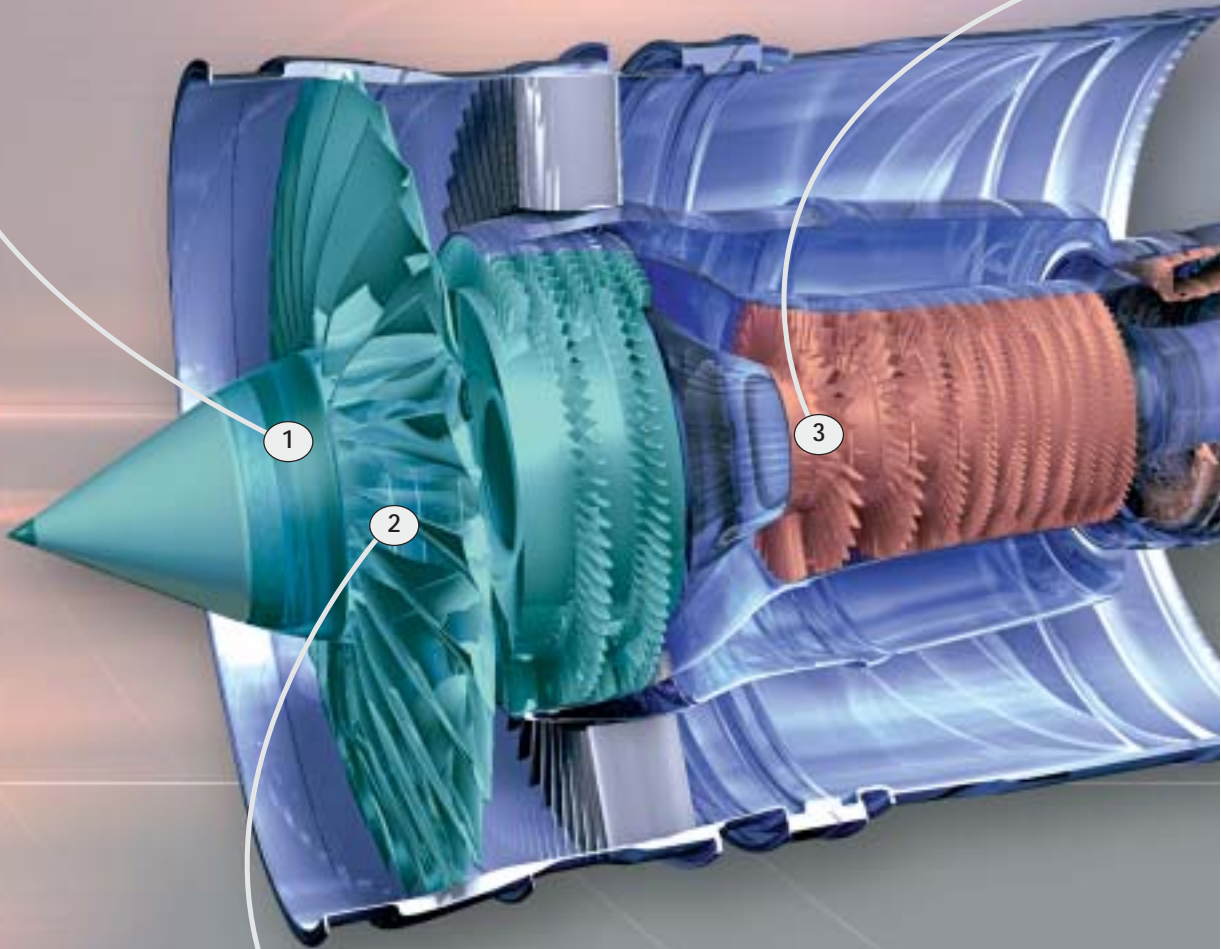
excellence
as standard



Telemetry system (Transmitter, receiver and power supply)



1. LP application



LP system

HP system

2. LP Antenna system





Rolls-Royce



3. HP application

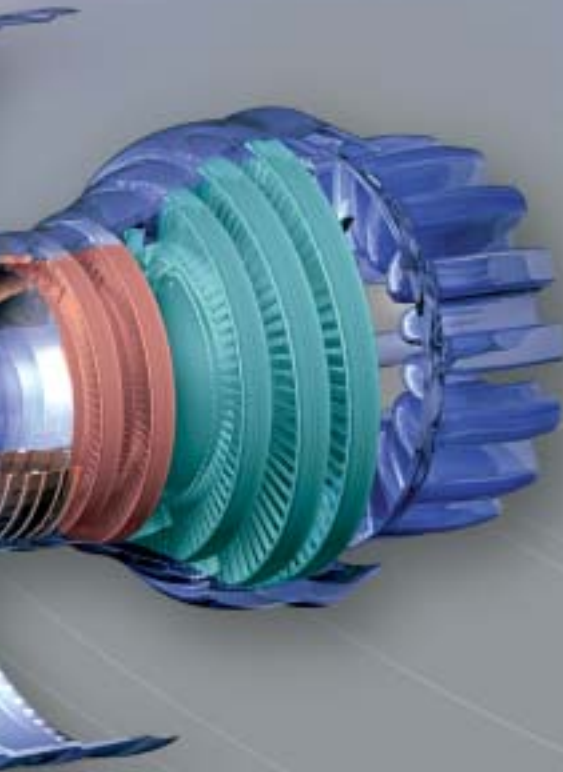
...key benefits

- Fully digital system
- High transmission accuracy and signal quality
- Standardised installation ensures high flexibility
- Modular concept with flexible number of channels
- Operation temperature from -20°C to 120°C
- Contact free and maintenance free inductive power provision
- Radial acceleration up to 50,000G

...extensive knowledge

The build and test group has an experienced team of highly skilled engineers who provide unequalled knowledge of the BR700 family of engines and telemetry systems. The team is extremely customer-focused, ensuring an efficient service and response.

Standardised installation principle
gives
high flexibility



	Temperature Module	Static Pressures Module	High Level Module	Static SG Module	Dyn. SG Module
channels	8 + moduletemp.	8 + moduletemp.	8 + moduletemp.	2	8 (static muxer & moduletemp.)
Signal bandwidth per channel	18,75 Hz	18,75 Hz	18,75 Hz	5 kHz	40 kHz
Resolution	13 bit ADC	13 bit ADC	13 bit ADC	12 bit ADC	12 bit ADC
Accuracy	+/- 1°C	0,025% of F.S.	0,025% of F.S.	0,05% of F.S.	0,05% of F.S.
Sensor	T/C 0-1250°C type K or N mV mode	Single Kulites 8 Ch Scanivalve (ZOC23)	Hot film input range adjustable	Input range +/- 10 mV +/- 100 mV	Input range +/- 2,5 mV +/- 25 mV
Operating temperature	0-90°C 0-120°C opt.	0-90°C -20-120°C opt.	0-90°C -20-120°C opt.	0-90°C -20-120°C opt.	0-90°C -20-120°C opt.
Antenna/power external system	X	X	X	X	X
Antenna/power internal system	X		X		

For further information please contact:

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