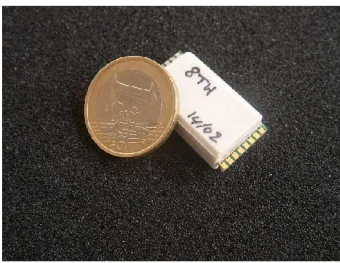


## Strain, pressure and temperature measurements On propeller, and turbine (Low Pressure)



48 channels TELEMETRY



8 Channels  
miniature module



**ATEB** telemetry support 80 synchronous temperature and strain gage inputs. Radio data stream transmission ease the integration of **ATEB** telemetry on turbine Low pressure stage and propellers, for example aerospace Low pressure turbine or wind turbine. Overall dimension, weight and architecture allow direct integration of **ATEB** telemetry on shaft.

### **Electric specifications:**

- static and dynamic strain : 120 to 1200 Ohm gage
- Embedded open and short circuit gage test (true integrated sinus generator)
- Maximum phase shift between channels : less than 3°
- Temperature measurement : Thermocouple type K-N-J, 1200°C max
- Bande pass :
  - 15Hz - 40kHz per channel (dynamic gage)
  - 15Hz-4kHz per channel (static gage)

### Options :

From 4 to 48 strain gages and 8 to 80 temperature channels.

**Specific high band pass design on demand.**

### **RF specification:**

- PCM-PSK data transmission
- Max RF Power : 5mW
- Frequency range : 2.4GHz
- Rate : 40Mb/s
- Remote control : On/Off, gain, bande pass and gage current adjustment on the fly.

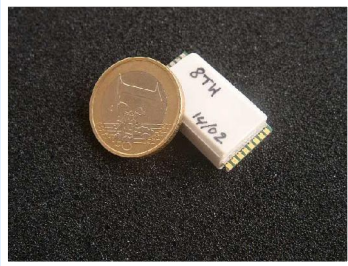
### **Technical specifications**

- Supply : Rechargeable Battery or Induction
- Opérating temperature : -50°C/+85°C (125°C option)
- Acceleration : 30000 G

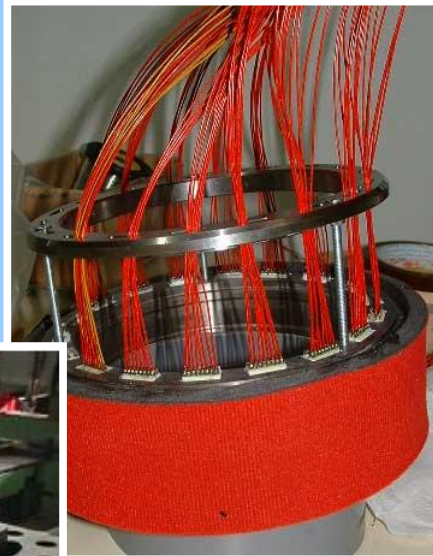
### **Receiver :**

- Analog output emphasis (sinx/x)
- Analog output +/-5V or 0/10V
- PCM Digital output (20Mb/s NRZ)

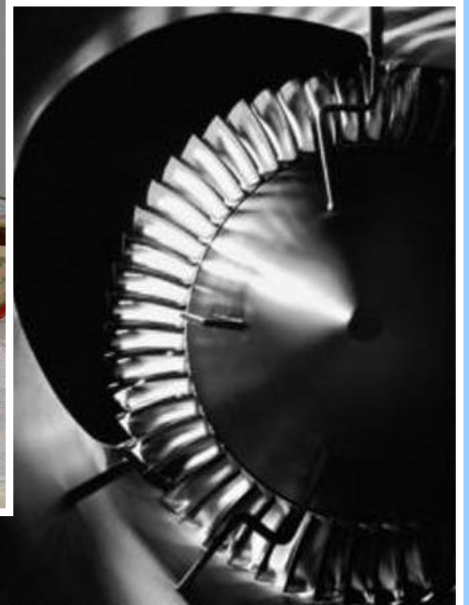
## Strain, pressure and temperature measurements On turbine and turbojet (High Pressure)



**8 Channels miniature module**



**80 Channels TELEMETRY**



**ATEH** telemetry support 80 synchronous temperature and strain gage inputs. HF data stream transmission ease the integration of **ATEH** telemetry on turbine High pressure stage, for example aerospace high pressure turbine or gaz turbine. Overall dimension, weight and architecture allow direct integration of **ATEH** telemetry on hollow shaft.

### **Electric specifications:**

static and dynamic strain : 120 to 1200 Ohm gage  
Embedded open and short circuit gage test (true integrated sinus generator)  
Maximum phase shift between channels : less than 3°  
Temperature measurement : Thermocouple type K-N-J, 1200°C max  
Bande pass :  
15Hz - 40kHz per channel (dynamic gage)  
15Hz-4kHz per channel (static gage)

### Options :

From 4 to 48 strain gages and 8 to 80 temperature channels.

**Specific high band pass design on demand.**

### **Radio HF specification:**

PCM data transmission  
Frequency range : 900MHz  
Rate : 160Mb/s  
Remote control : On/Off, gain, bande pass and gage current adjustment on the fly.

### **Technical specifications**

Supply : Induction  
Opérating temperature : -10°C/+125°C  
Acceleration : 40000 G

### **Receiver :**

Analog output emphasis (sinx/x)  
Analog output +/-5V or 0/10V  
PCM Digital output (80Mb/s NRZ)