



# PRESSURE TRANSDUCERS

### **SATELLITE PROPULSION SYSTEMS**

- > OVER 300 PRESSURE TRANSDUCERS FLYING ON OVER 160 SATELLITES
- > 30 YEARS OF EXPERIENCE FOR SCIENTIFIC AND TELECOM MISSIONS
- > TOTAL CUSTOMER SUPPORT FROM DELIVERY TO END OF MISSION
- > OFF-THE-SHELF SOLUTIONS

## PRESSURE TRANSDUCERS

## **SATELLITE PROPULSION SYSTEMS**

	215XA-S6				225XA-S5	SAPT NEW GENERATION (under development)
Standard pressure range	7 bar	22 bar	150 bar	310 bar	22 bar to 275 bar	7 bar - 310 bar on demand
Technology	Bonded strain gages				Thin film strain gages	Thin film strain gages
Accuracy	Beginning of life: +/- 0.3%				Beginning of life: +/- 0.1%	Beginning of life: +/- 0.1%
	End of life (*): +/- 0.4%				End of life (*): +/- 0.3%	End of life (*): +/- 0.3%
	of full scale with polynomial modelization (pressure / temperature)					
Operating temperature range	-20°C / +75°C				+4°C / +55°C	-20°C / +75°C
Electrical characteristics	Supply 28 VDC				Supply +/- 15 VDC	Supply 28 VDC (other supply customizable)
	Isolation DC/DC (IN/OUT)					Isolation DC/DC (IN/OUT)
	Voltage pressure output: Up = 0 5 V				Voltage pressure output: Up = 0 5 V	Voltage pressure output: Up = 0 5 V
	Resistive temperature output: RT				Voltage temperature output: Up = 0 5 V	Resistive temperature output: RT
Power consumption	< 20 mA				< 20 mA	< 20 mA
Electrical interface	12-pin hermetic connector				Flying leads	12-pin hermetic connector
Radiation environment	~ 30 krad				~ 10 krad	~ 30 krad
Mechanical interface	2 lugs				2 lugs	2 lugs
	Length = 70 mm, diameter = 44 mm				Length = 58 mm, diameter = 48 mm	Length = 70 mm, diameter = 48 mm
Mass	215 g				225 g	
Comments	- (*) Depending on space radiation environment - TA6V housing and pipe (1/4" diameter); length and diameter without connector, lugs and tubing - Pressure range easily customizable					

**High-quality standards :** Certification: ISO 9001 (version 2008), EN 9100 (version 2009), AQAP2110 (version 2009) ESA certification: ECSS-Q-ST-70-08C, ECSS-Q-ST-70-38C, ECSS-Q-ST-70-26C



### **CUSTOMER-TAILORED SOLUTIONS**

- > Specific qualification environment
- > Easily customizable design
  - Compatibility with all propulsion fluids
- Range & interfaces
- Materials, pressure port & connector

### **HIGH-PERFORMANCE TECHNOLOGIES**

- > High accuracy & linearity
- > High reliability
- > Long lifetime
- > Harsh environment capabilities (vibrations, temperature)

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