



EXXELIA<sup>®</sup>



Inside

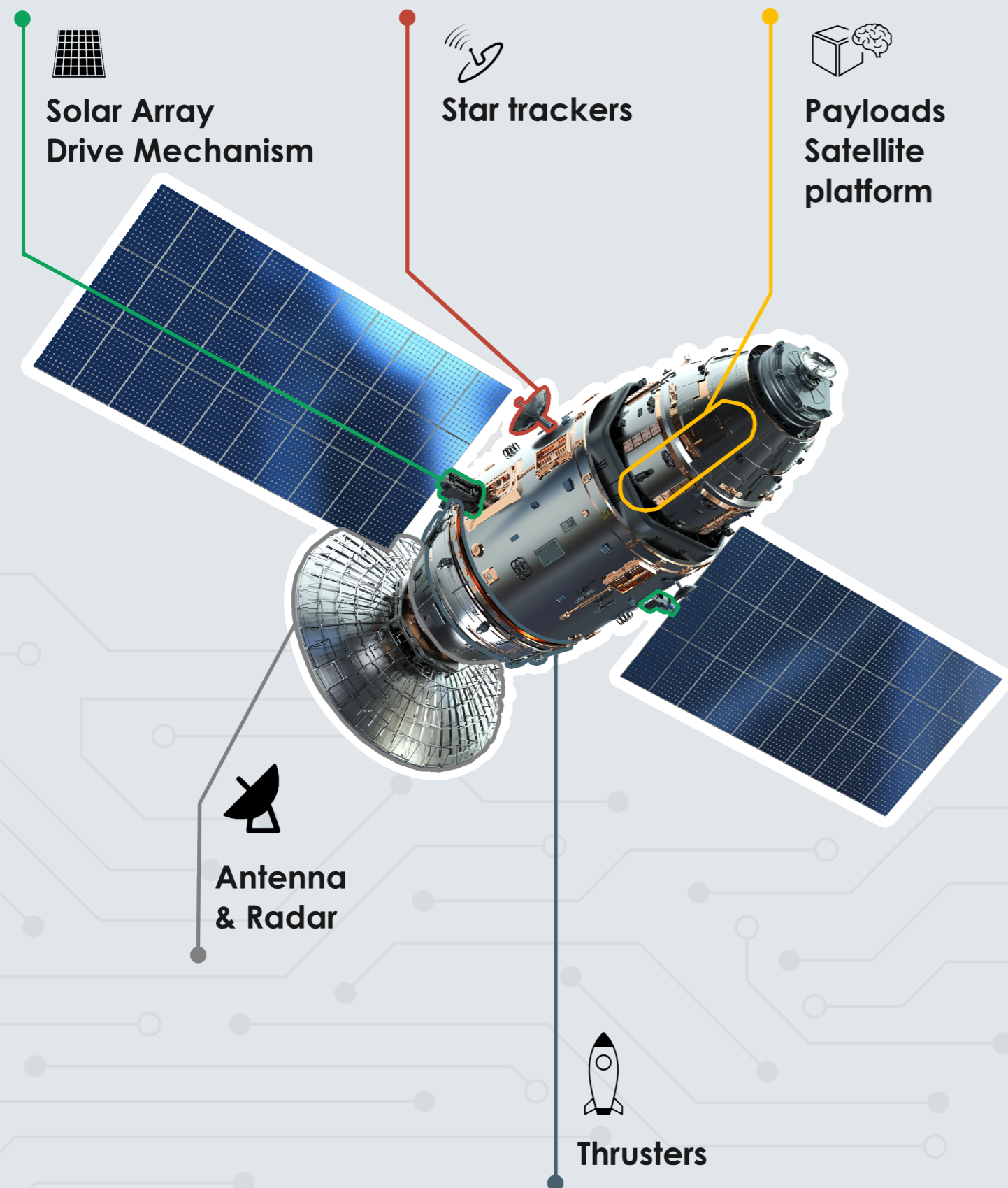

# SATELLITES & CONSTELLATIONS

Strong of its **40+ years experience in space**, Exxelia offers the most complete space qualified passive components portfolio. From Space exploration to New Space constellations, from launchers to military satellites, Exxelia offers the capacitor, inductor, transformer, resistor, EMI-filter, potentiometer and tailored to the reliability level you need.


# With more than 50 ESA QPL product series

(film capacitors, class 1 and class 2 ceramic capacitors, solid and wet tantalum capacitors, inductors and EMI filters),


Exxelia supplies most functions of a satellite platform, payload or launcher.

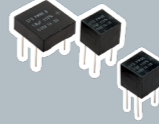
**Rotary potentiometer**  
**Position sensors**  
 Extra low profile / miniature pan-cake / servo type  
 Diameter range : < 10mm - 80mm  
 - 55°C to +125°C




**Linear potentiometer**  
**Position sensors**  
 Electrical travel 10 to 525 mm  
 - 55°C to +150°C




**High voltage**  
**HT Series, Mica**  
 Molded capacitor  
 Capacitance: 100 pF - 2,2 μF  
 Up to 20 000 V  
 - 55°C to +125°C




**High capacitance**  
**Polyester PET - PM 90S & 94S**  
 Capacitance: 0,22 μF - 1 500 μF  
 Voltage: 50 V - 630 V  
 - 55°C to +125°C




**High capacitance**  
**Polyester PET - PM 907S & 948S**  
 Capacitance: 0,022 μF - 180 μF  
 Voltage: 50 V - 1 250 V  
 - 55°C to +125°C



**High voltage resistors**  
**HVR**  
 Ultra high stability  
 Voltage: 2 V - 40 V  
 Resistance: 100 kΩ - 4 TΩ  
 Tolerance to 0,1%




**High capacitance**  
**Capacitors CNC 3x & 5x**  
 Stacked technology  
 CNC 3x : Cap. max 68 μF  
 CNC 5x : Cap. max 180 μF  
 - 55°C to +125°C




**High voltage**  
**Capacitors TCF series X7R**  
 Up to 10 kV  
 Hi-Rel capacitors  
 Conformal coated capacitors  
 - 55°C to +125°C



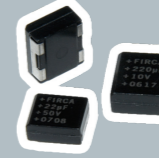
**Chips capacitors**  
**Ceramic CEC & CNC Series**  
 Hi-rel capacitors  
 CEC series : Cap. max 470 nF  
 CNC series : Cap. max 12 μF  
 - 55°C to +125°C



**Tantalum capacitors**  
**Solid MnO<sub>2</sub> - SMT47**  
 Very high capacitance  
 High reliability / Low ESR  
 Capacitance: 47 μF - 1 500 μF  
 Voltage : 6,3 V - 63 V



**High Voltage Block**  
**Custom film capacitor**  
 High Voltage Block  
 Composite reconstituted Mica  
 Capacitance: 300 pF - 300 nF  
 Voltage: 1 000 V - 12 000 V

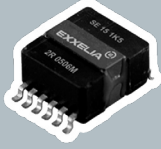


**Tantalum capacitors**  
**Solid MnO<sub>2</sub> - CTC 21/CTC 21 E**  
 High reliability, high ripple current  
 Very low ESR  
 Capacitance: 5,6 μF - 680 μF  
 Voltage: 6,3 V - 100 V

Powering Performance

Exxelia is valued for its ability to develop standard and custom products complying with the most demanding qualifications.

Contact us [www.exxelia.com/en/contact](http://www.exxelia.com/en/contact)



### Magnetics

#### SESI & CMC

Good thermal dissipation  
+ 20% power density  
Protected winding:  
enhanced robustness



### MIL STD-1553

#### Transformers

Height < 3.81 mm  
Transfer moulded product  
Withstands harsh  
environments



### RF Chip Inductors

#### MPCI 2000

Low Tolerance up to 1%  
Frequency: 0,79 MHz - 500 MHz  
Voltage: 40 V - 400 V  
- 55°C to +125°C



### High capacitance

#### DSCC 93026 & 10004

Capacitance: 10  $\mu$ F - 10 000  $\mu$ F  
Voltage: 10 V to 125 V  
- 55°C to +125°C



### Dielectric resonators

#### E7000

High Q factor : 25 000 at 10 GHz  
Frequency: 5 900 MHz - 37 150 MHz  
Custom shapes available



### Ferrites

#### A, D, NZ, U, Y Series

High magnetization  
High Curie temperature  
High continuous power



### Coaxial resonators

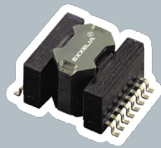
#### High Q factor

Size 2x2 mm available  
Frequency: 300 MHz - 6 GHz



### Slip rings

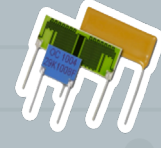
Qualified for space  
environment **SADM (Solar  
Array Drive Mechanism)  
System** - Customizable



### Flyback transformers

#### CCM magnetics

Pick and place friendly  
Frequency range: up to 1MHz  
Multiple outputs  
- 55°C to +125°C



### High voltage resistors

#### HVD Series and custom

Very Low Noise  
Voltage: 4 kV - 40 kV  
Resistance: 100 k $\Omega$  - 2 T $\Omega$   
- 55°C to +150°C



### EMI-RFI Filters

#### Multiple point feed through Filters

D-SUB interface  
Capacitance: 200 pF - 4 400 000 mH  
Voltage: 25 V - 200 V  
- 55°C to +125°C



### EMI Filters

#### Solder-in or threaded package

Capacitance: 10 pF - 33 000 pF  
Up to: 10 A  
- 55°C to +125°C

