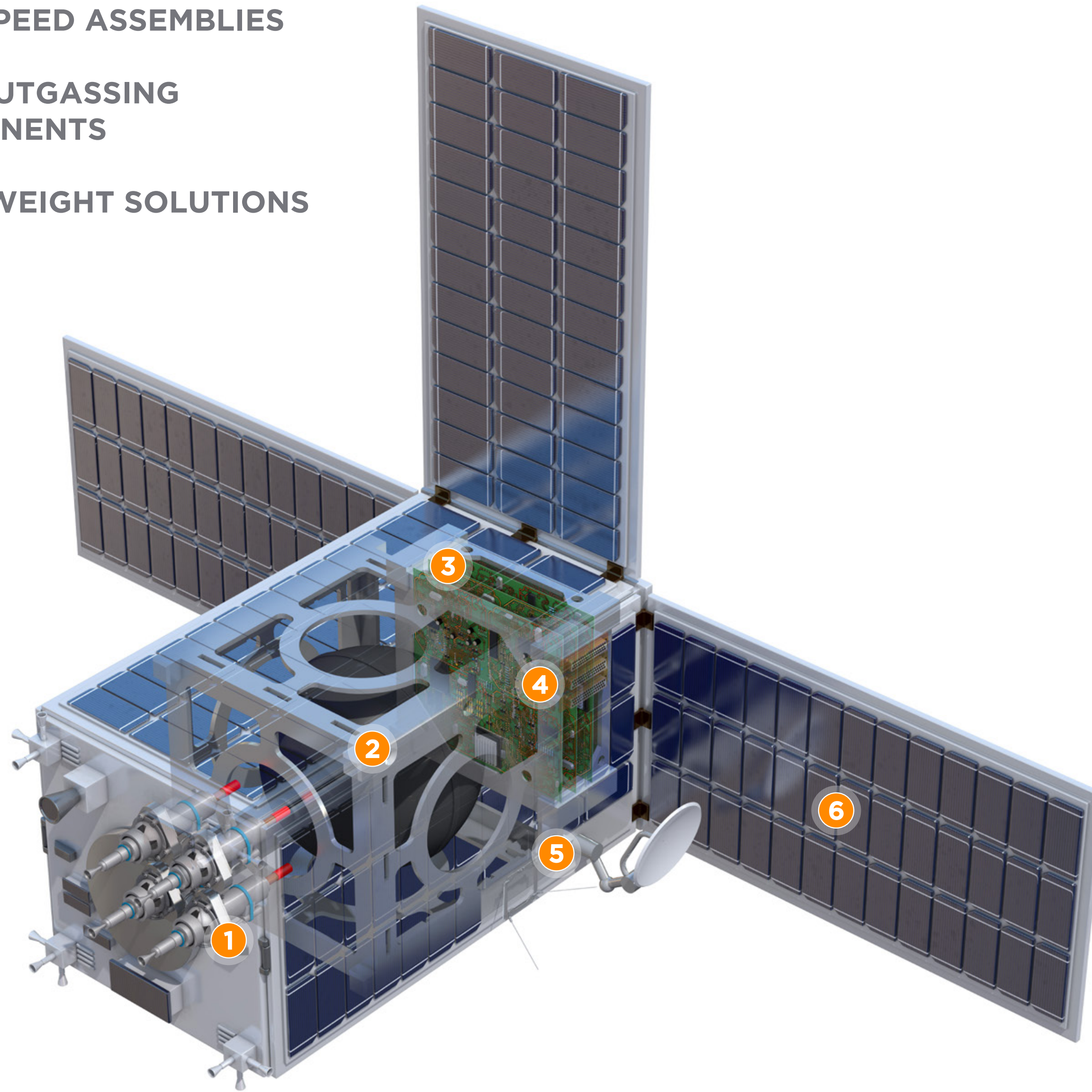


# LEO SATELLITE SUBSYSTEMS

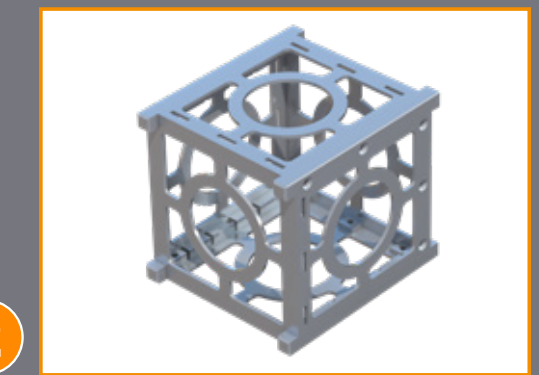
- HIGH-SPEED ASSEMBLIES
- LOW OUTGASSING COMPONENTS
- LIGHT WEIGHT SOLUTIONS



1

## PROPULSION

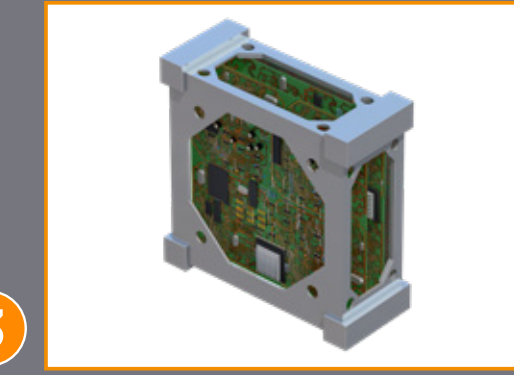
- Ruggedized Solutions
- Temperature and Pressure Sensors



2

## STRUCTURE

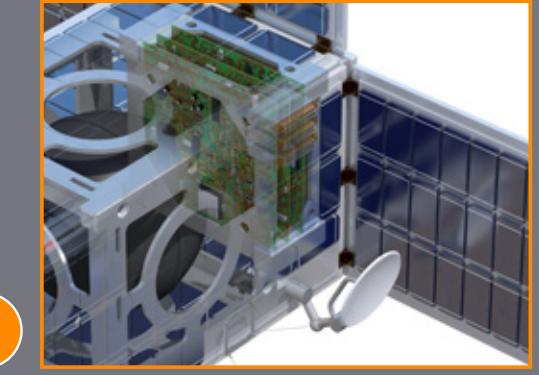
- Cable Management Structure Integration
- Vibration Sensors



3

## DATA AND PAYLOAD

- PCB Connectors
- Cable Assemblies
- Sensors
- Fibre Optics



4

## SYSTEM INTERCONNECT

- Cable Assemblies
- D-Shaped Connectors
- Fibre Optics
- Cable Management



5

## COMMUNICATIONS

- RF Connectors and Assemblies
- Cable Management Solutions



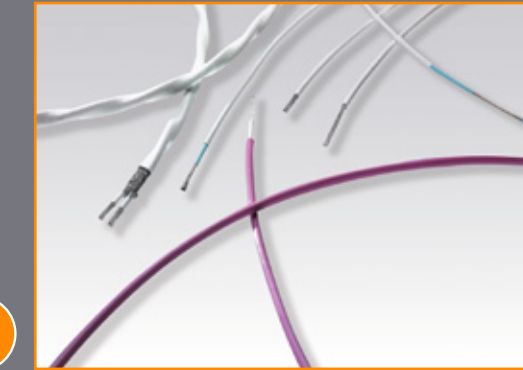
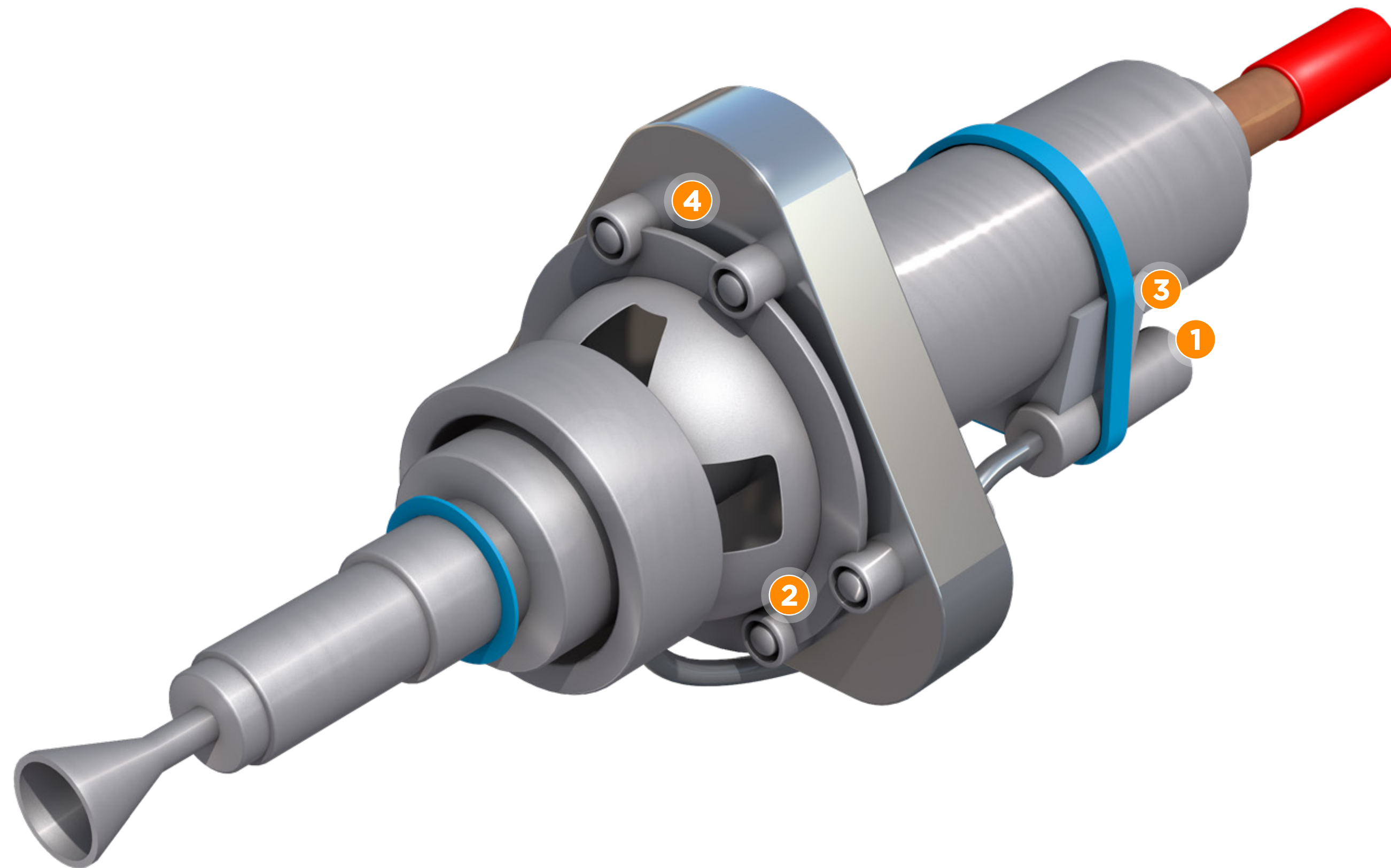
6

## SOLAR PANELS

- High Temperature and Radiation-Hardened (Rad-Hard) Cable Assemblies
- Relays and Contactors

# PROPULSION SUBSYSTEM

- HIGH VIBRATION
- RUGGEDIZED SOLUTIONS



1

## RAYCHEM SPEC 55 SIGNAL AND POWER SPACE WIRE

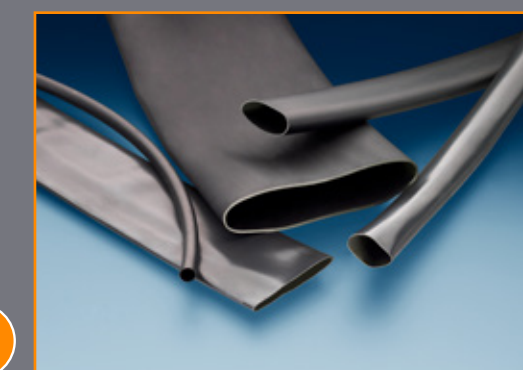
- Operating Temperature Range: -65°C to +200°C
- ETFE Insulation Material
- NASA compliant
- ESA or Mil-Spec Versions Available
- Ultra Low Fluoride Versions Available



2

## MICRODOT CONNECTORS

- D-Subminiature, Micro-D and Ultra-Miniature Connectors
- Mil-Spec Version Available



3

## HIGH-TEMPERATURE TUBING

- +200°C and +150°C Alternatives
- NASA Spec
- RT-555 High Temperature Heat Shrink Tape
- RT-220 Heat Shrink Tubing
- Raychem RNF-150 Heat Shrink Tubing



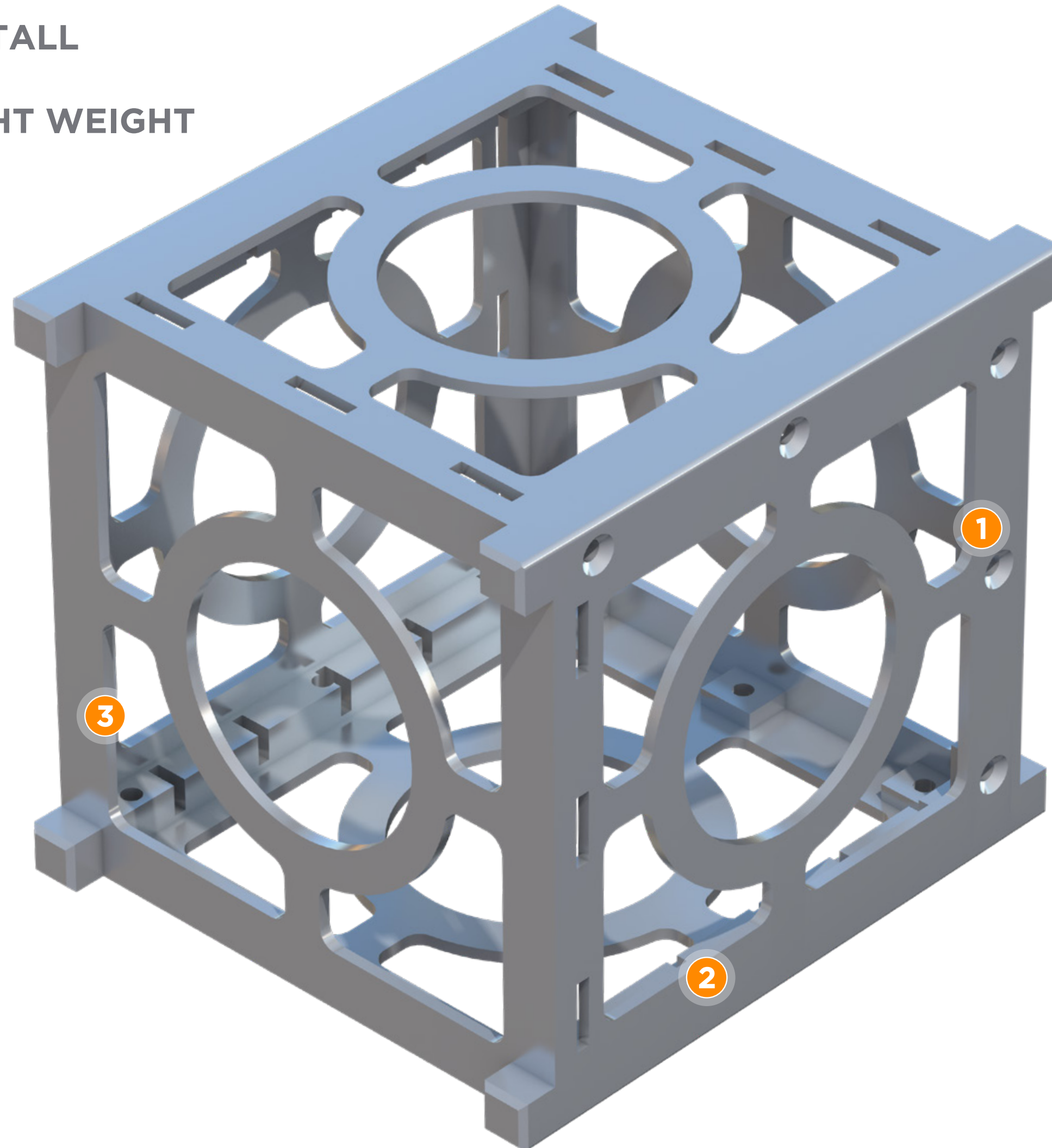
4

## TEMPERATURE SENSORS

- Low Temperature Satellite Applications
- Temperature Monitoring

# SATELLITE STRUCTURE

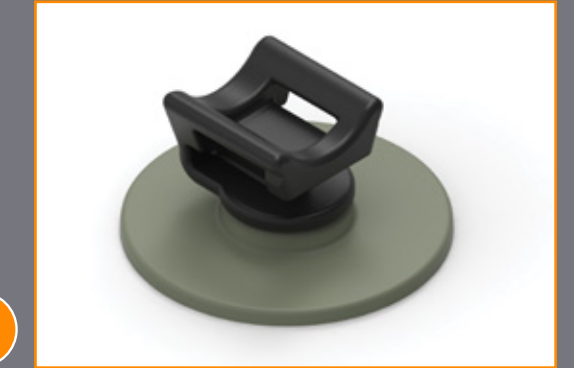
- CABLE MANAGEMENT INTEGRATION
- QUICK-INSTALL
- ULTRA LIGHT WEIGHT



1

## P-CLAMPS

- Quick Installation Cable Management Solutions



2

## ADHESIVE BRACKETS

- Lightweight custom bracket design



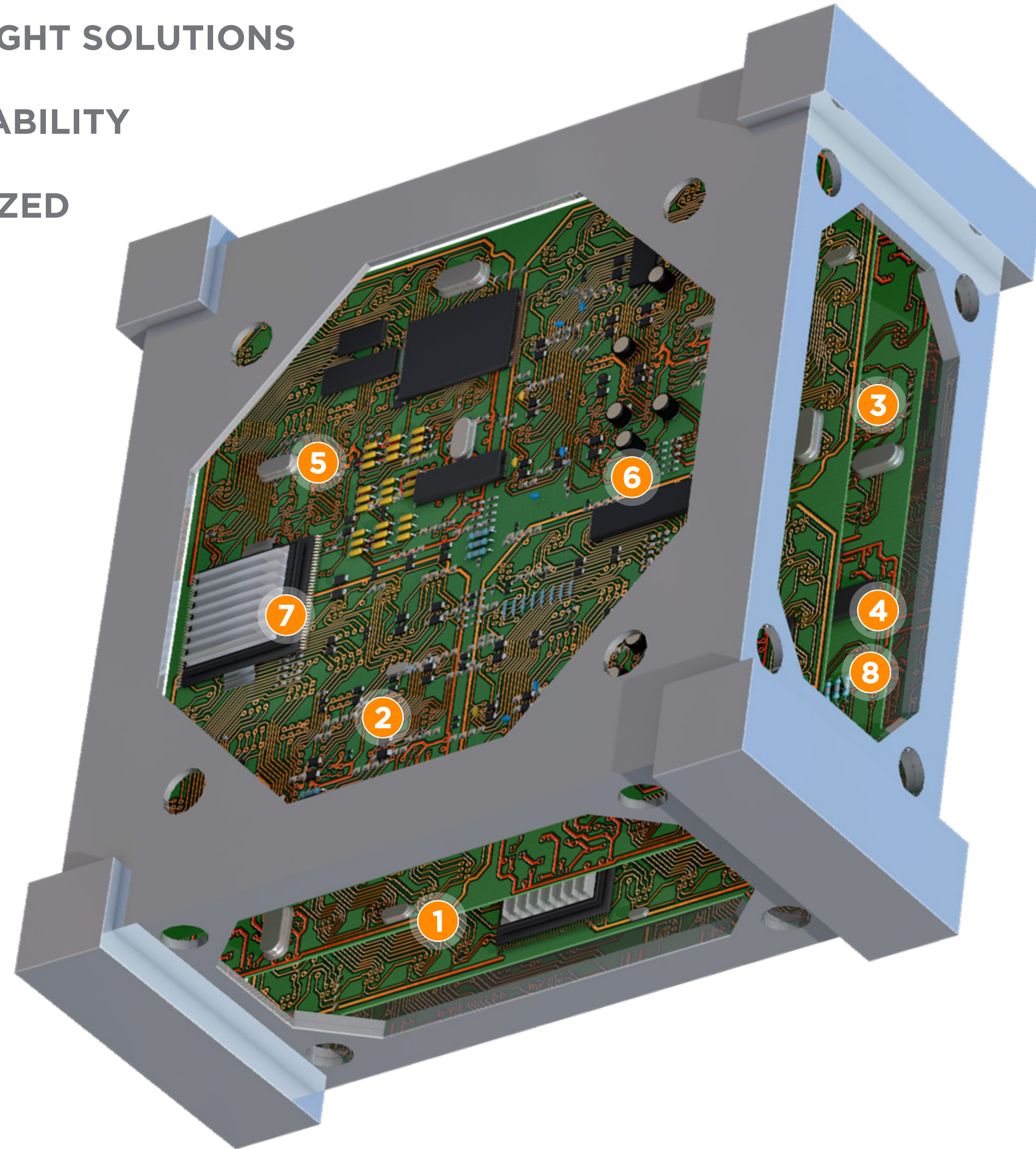
3

## VIBRATION SENSORS

- Accelerometers
- Satellite Structure Monitoring

# DATA AND PAYLOAD

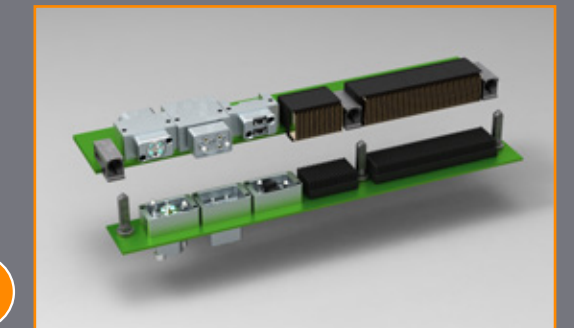
- HIGH SPEED
- LIGHT WEIGHT SOLUTIONS
- HIGH RELIABILITY
- MINIATURIZED



1

## MULTIGIG RT 2-R CONNECTOR

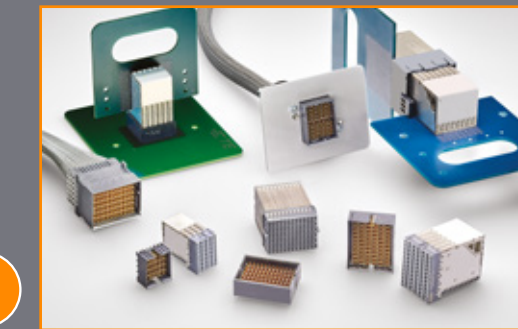
- PCB Connector
- High Density
- High Speed



2

## SPACE VPX SOLUTIONS

- VITA 78
- VITA 67 RF Interface
- VITA 66 Optical Modules



3

## STRADA WHISPER CONNECTORS & CABLES

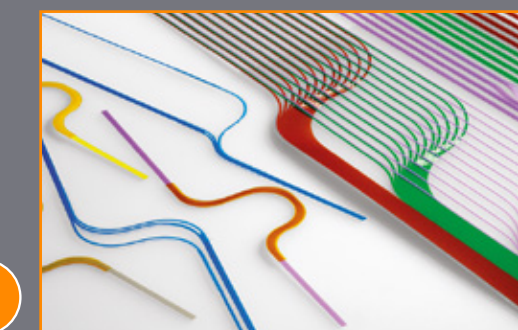
- High Density
- High Vibration Resistance



4

## TERMINALS & SPLICES

- Solistrand Terminals and Splices
- COPALUM Terminals and Splices



5

## FIBRE OPTIC ASSEMBLIES

- Optical Flex Circuits
- High Density
- Ultra Light Weight
- EMI Resistance



6

## RESISTORS

- Surface Mount
- Through-hole
- Chassis Panel Mount



7

## GOLD CHIP THERMISTORS

- Satellite Camera & Telecom Systems



8

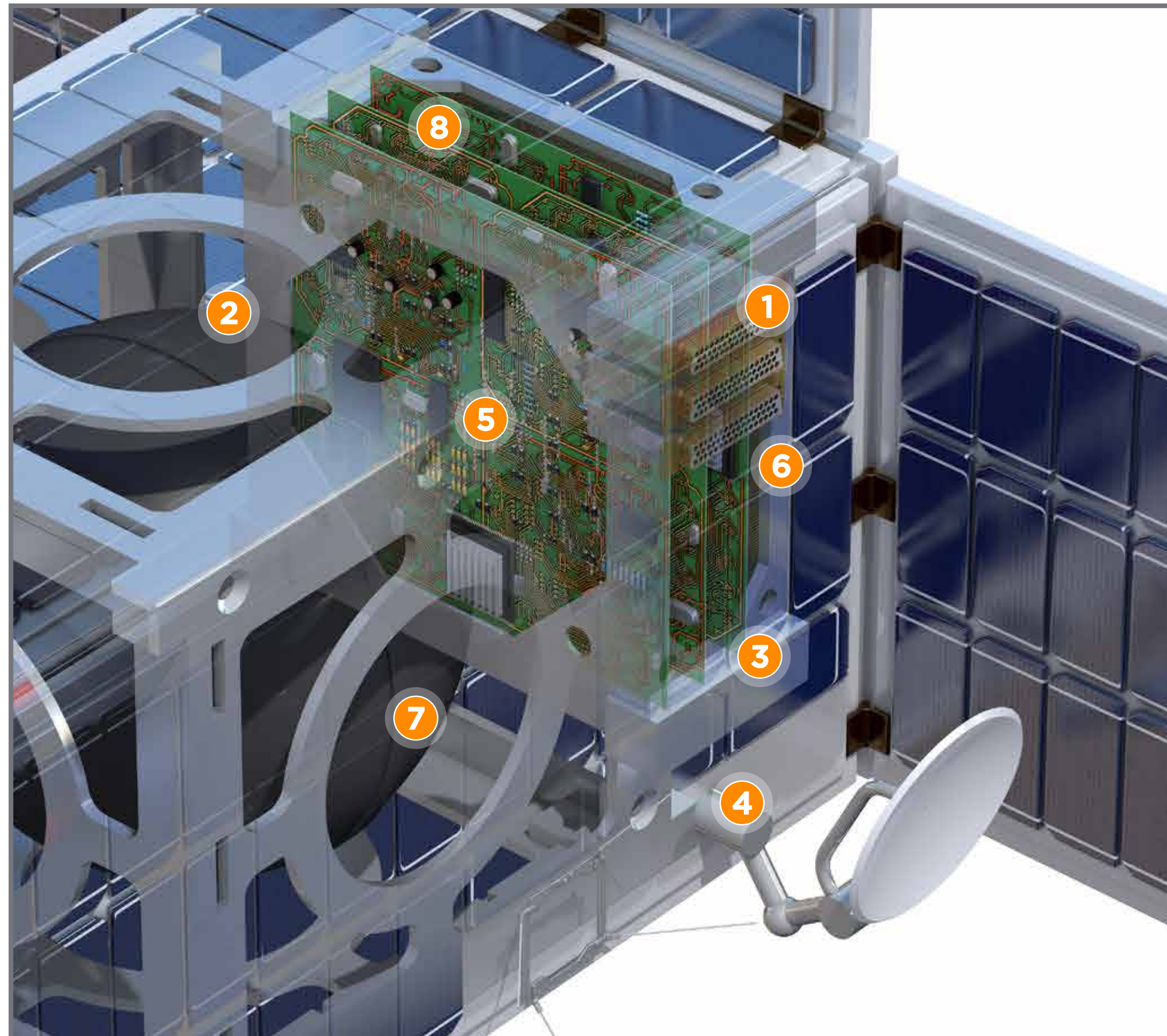
## MICRO-D NANOMINIATURE CONNECTORS

- D-Sub, Micro-D and Nano-D
- NASA Spec
- Mil-Spec Available



# SYSTEM INTERCONNECT

- EMI RESISTANCE
- LIGHT WEIGHT SOLUTIONS
- HIGH RELIABILITY



SELECT ANY PRODUCT TO OPEN MORE INFORMATION



1

## RECTANGULAR CONNECTORS

- D-Subminiature Connectors
- Micro-D and Nano-D
- NASA Spec
- MTC Connectors



2

## CIRCULAR CONNECTORS

- DEUTSCH DBAS Series Connector
- ESA Approved
- RSM Connector
- D38999 Space Grade Connectors



3

## RAYCHEM SPEC 55 LOW FLUORIDE ETFE SPACE WIRE

- NASA Compliant
- Mil-Spec Approved
- Low Outgassing



4

## RF CONNECTORS & RF ASSEMBLIES

- SMA, SMP, BNC connectors
- High Frequency (Ka-Band)
- High Flexibility
- High Temperatures



5

## SOLDERSLEEVE DEVICE FOR SPACE

- Strain Relief with Ratings up to +150°C
- Tensile Strength up to 15 Pounds
- One-Step Shield means Easy Inspection



6

## 369 SPACE GRADE CONNECTORS

- EMI Protection
- Circular Backshells



7

## VACUUM EQUIPMENT

- DM feedthrough 13084

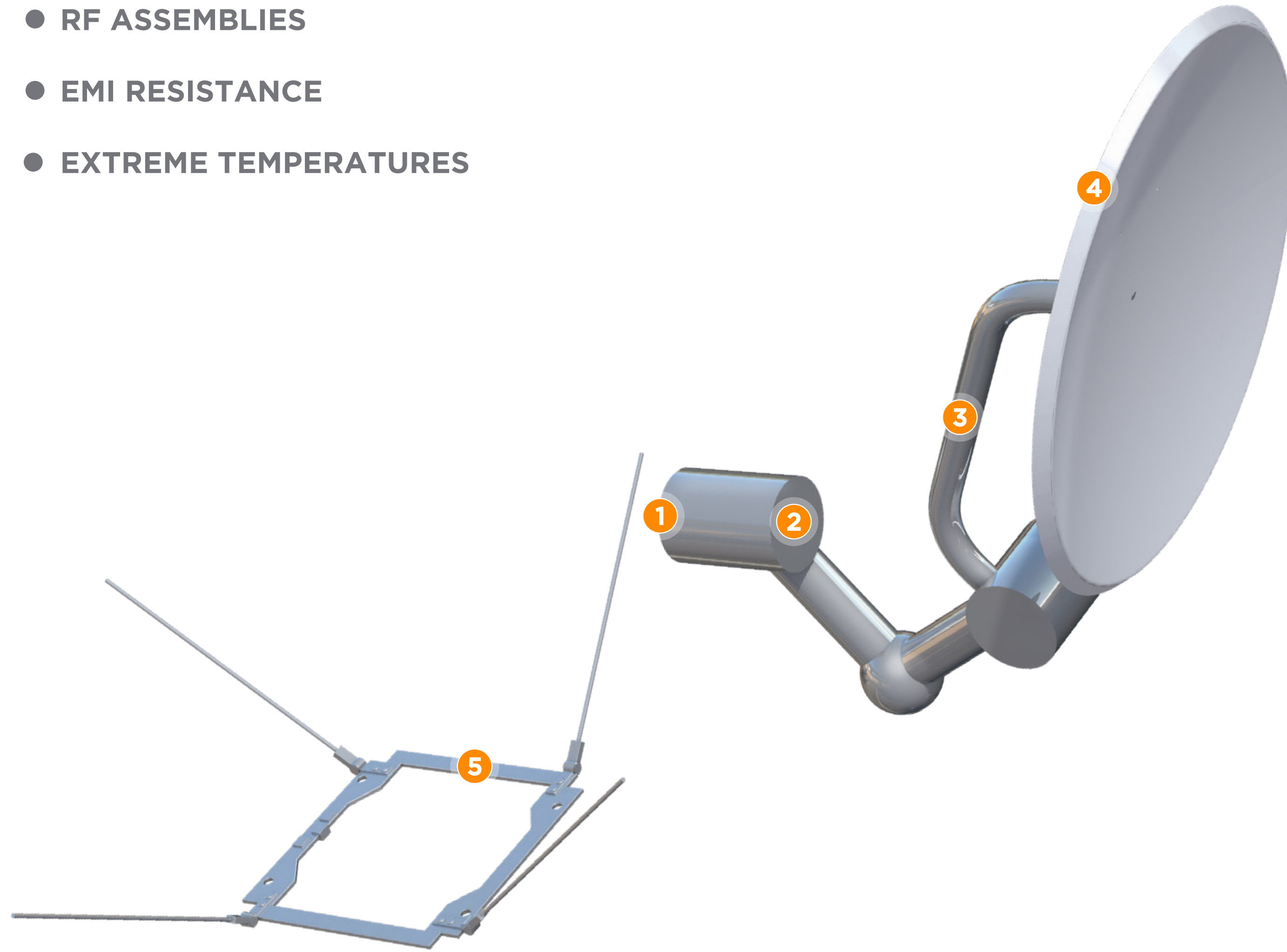


8

## BACKSHELLS

- Small Form Factor with simple push pull mating
- Lightweight at 2.9 g per mated pair
- Integrated tie down reduces installation complexity

- RF ASSEMBLIES
- EMI RESISTANCE
- EXTREME TEMPERATURES



1

## RF ASSEMBLIES

- Cheminax RF Cable
- SMA, SMP, BNC Connectors and Assemblies



2

## BACKSHELLS

- EMI Protection
- Circular Backshells



3

## RAYCHEM INSTALITE LIGHTWEIGHT BRAID

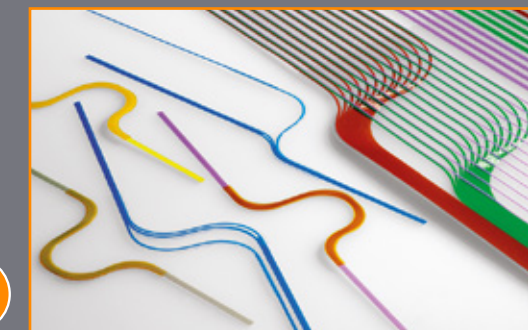
- Up to 50% Lighter than Traditional Copper Braids
- EMI Protection
- Radiation Protection



4

## SENSORS

- MEAS Space Qualified Sensors
- ESA, NASA Approved
- Radial, Bead and Custom Packages Types



5

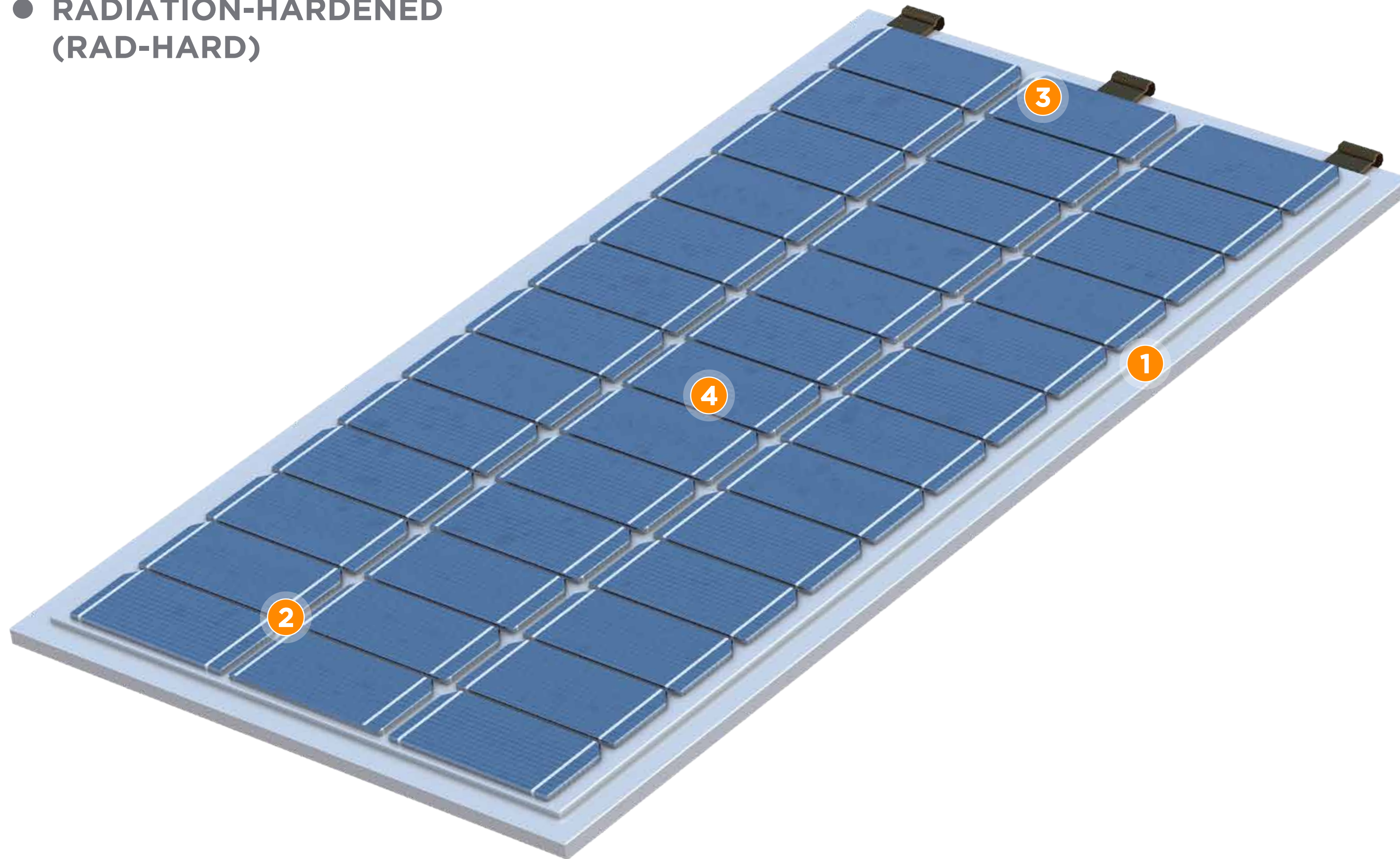
## FIBRE OPTIC ASSEMBLIES

- Optical Flex Circuits
- High Density
- Ultra Light Weight
- EMI Resistance



# SOLAR PANELS

- LIGHT WEIGHT
- THERMAL SHOCK
- RADIATION-HARDENED (RAD-HARD)



SELECT ANY PRODUCT TO OPEN MORE INFORMATION



1

## FLEXIBLE POWER CABLES

- Low Outgassing
- Small Bend Radius
- Abrasion Resistant



2

## RECTANGULAR AND FLAT CONNECTORS

- D-Sub Connectors
- DEUTSCH D-Paso Series Connectors
- Lightweight
- MTC Connectors



3

## RELAYS AND CONTACTORS

- HARTMAN N200 and N400 Series Contactors
- CII Hermetic Relays
- NASA Qualified MA and MAD Family



4

## TEMPERATURE SENSORS

- Satellite Thermal Control Management
- Solar Array Panel Temperature
- Battery Temperature Management
- ESA Qualified
- NTC Thermistor, NASA Qualified