For reduced weight and increased bandwidth in satellite applications—plus complete electrical isolation and immunity from RF interference

- Selected components subjected to Gamma, proton, and heavy ion radiation testing
- Data transmission rates up to 10 – 25 Gbps per channel
- Zero EMI / ground loop susceptibility
- Harsh-environment: high temperature, high vibration and shock tolerant

HIGH-DENSITY, RUGGEDIZED MULTI-CHANNEL MT FIBER OPTIC CONNECTORS AND CABLE ASSEMBLIES

- Ruggedized connectors / cables with MT optical ferrules
- SuperNine™ MIL-DTL-38999; 1, 2, 3 or 4 MT ferrules
- Series 79 Rectangular and Micro-D Subminiature packaging
- -40°C to +85°C operating temperature range

Ruggedized Photonics for Free Space, Fiber Optic RF and Digital Datalinks

Ruggedized Photonics for Free Space, Fiber Optic RF and Digital Datalinks

Radiation-tolerant and other aerospace photonics

PCB-MOUNTED RUGGEDIZED PHOTONIC TRANSCEIVERS

- 50 Mbps to 5 Gbps:
  - SpaceFiber, sRIO, GB Ethernet, and FiberChannel
  - -40°C to +85°C; Gamma, proton, and heavy ion radiation

PARALLEL OPTICAL 40GBPS PCB-MOUNT PHOTONIC TRANSCEIVER

- 4x10 and 4x26 Gbps Parallel Optical Transceivers
- MTP optical connector, removable electrical connector
- Hermetic opto-electronic hybrid
- -40°C to +85°C; Heavy ion tested, high shock and vibe
- Conduction and convection cooling form-factors available

SIZE #8 OPTO-ELECTRONIC CONTACTS / CONNECTORS

- Fiber-optic transmitter or receiver in a size #8 contact
- 50 Mbps to 5 Gbps
- Supports balanced CML protocols:
  - SpaceFibre, sRIO, GB Ethernet, and Fiber Channel
  - -40°C to +85°C; Gamma, proton, and heavy ion radiation

SPACE FIBRE ACTIVE OPTICAL CABLES

- Successor to SpaceWire protocol with up to 6.25 Gbps
- Allows ultra high-speed data streaming
- European Space Agency standard technology

FILTERED EYE DIAGRAM TEST RESULTS

Performance of Glenair Size #8 optoelectronic contact filtered eye diagrams at 4.25Gbps demonstrates suitability of the technology for high throughput, high bandwidth demand satellite applications including remote sensing and earth observation (climate, vegetation, forest biomass, aridity, ice caps, wind speeds, sea levels, magnetics), communication, quantum key, telecoms, and worldwide expansion of internet coverage.