

Optical Transceivers for Intra Satellite Data Bus

Solving the Challenges of Size, Weight, Power and Cost for Next-Generation Satellites

With the amount of data that needs to be moved through a satellite growing exponentially, traditional copper wiring is no longer a feasible option. Spectrum Control's OPTO-FIRE™ "optic core" offers a replacement for traditional copper cabling while delivering improved data transfer performance. It is designed for the harshest of environments – space.

Optical Transceiver Innovation

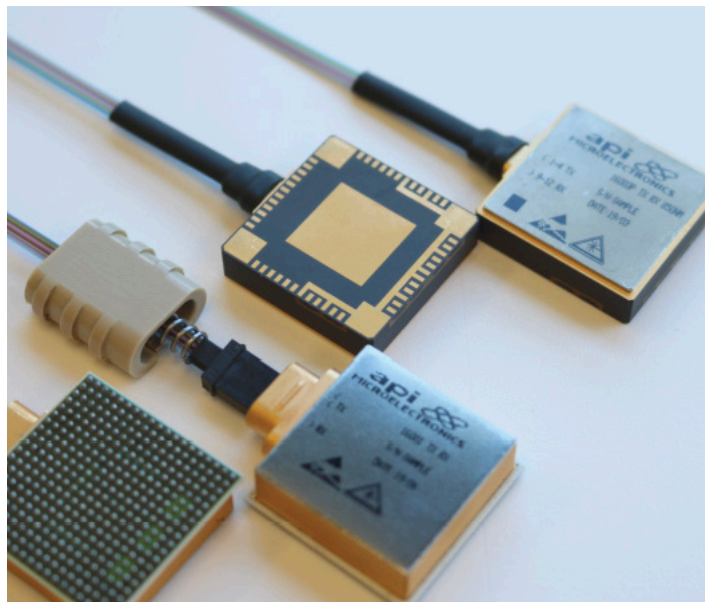
Optical Fibre is up to 90% lighter and 70% lower in volume than traditional copper cabling. It can also carry up to 10 times the data over much longer distances without the signal reduction associated with copper. Optical Fibre is also non-conductive and insensitive to electromagnetic effects, making it perfect for use in next generation satellite technology.

OPTO-FIRE is designed and manufactured in the U.K. in accordance with MIL-PRF-38534 Class H & K

With data rates of 25Gbps and soon pushing 56Gbps, Spectrum Control is at the forefront of Optical Transceiver development.



The OPTO-FIRE™ micro-optical transceiver incorporates and improves critical data communication systems, delivering highly reliable data transfer performance. This flexible product platform also provides fibre optic sensing and monitoring capabilities in systems where security, safety, and reliability are critical.



OPTO-FIRE™ Micro-Optical Transceivers

Product Details

- OPTO-FIRE™ specs include:
- Single channel core covers data transfer rates from 20Mbps to 12.5Gbps providing future proof system integration
- -50°C to +100°C expanded operating temperature for enhanced reliability
- Multiple packaging options
- Proven error free performance over 1.1km of multimode fibre