

COHERENT TERABIT TEST & MEASUREMENT INSTRUMENTATION FOR MULTI-BAND



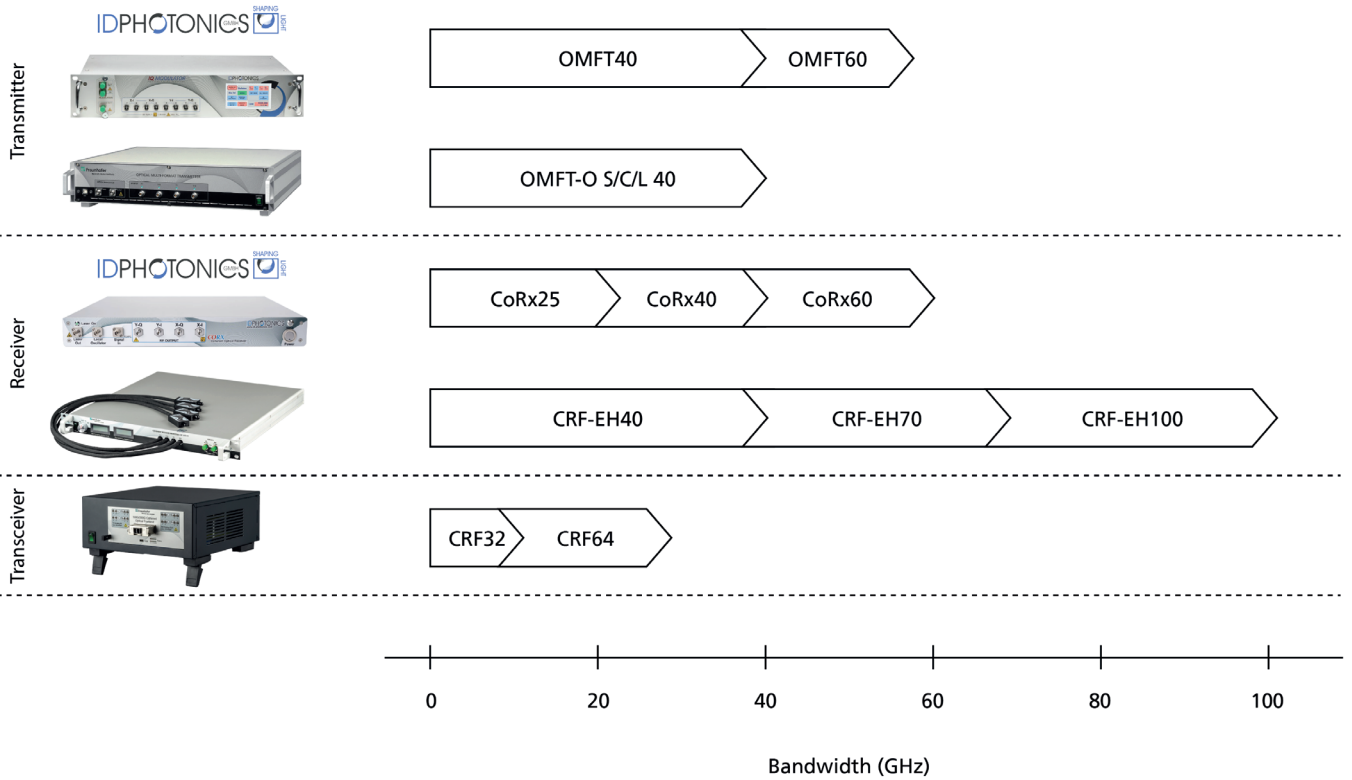
AT A GLANCE

- Fraunhofer HHI offers test & measurement equipment for Tbit/s coherent communication systems in the O- and S-C-L-U-Band
- Ideal for generation, transmission and coherent detection of high-speed optical dual-polarization m-PAM and m-QAM signals

- Multi-band capable coherent terabit communication is the key technology for ultra-high-speed data transmission. Coherent optical transmission techniques allow modulation of amplitude, phase, and polarization of the light for data transport, resulting in unprecedented data rates up to terabits per second.
- Fraunhofer HHI offers, in cooperation with our partner ID-Photonics, high-performance test & measurement instrumentation with multi-band technology for research and development of the next generation optical fiber-based communication.

The prototype portfolio includes:

- **Transmitter:** High-bandwidth dual-polarization transmitter up to 60 GHz in S-C-L-Band
- **Receiver:** High-bandwidth polarization-diverse coherent receiver up to 100 GHz in O-Band or S-C-L-Band
- **Transceiver:** Compact combined transmitter and receiver including laser source for up to 69 GBd
- **Loop Control:** Control & switch unit to emulation optical long haul transmission systems from O- to U-Band

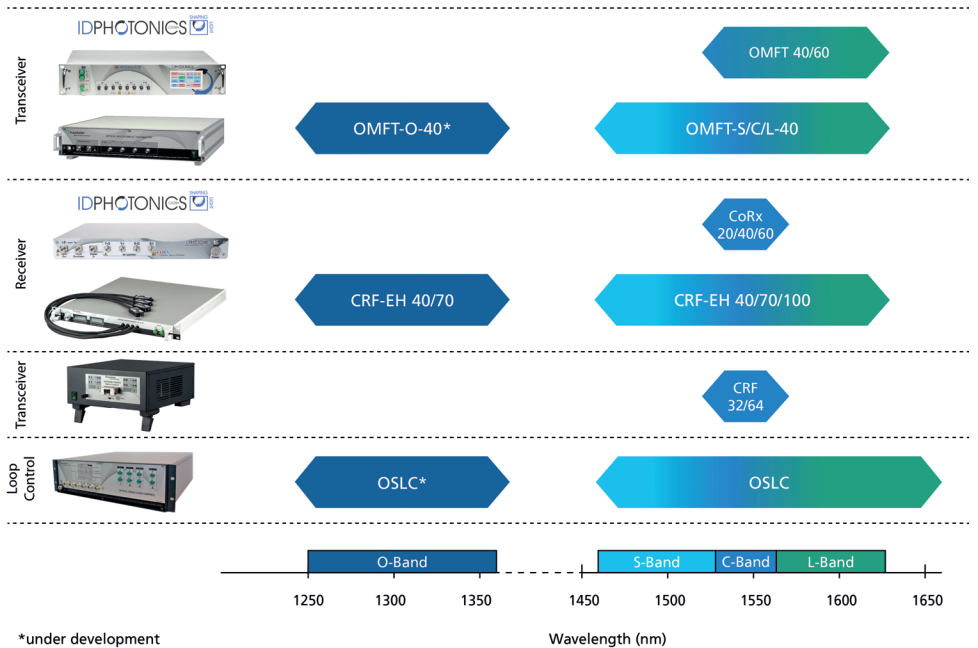


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*under development

Wavelength (nm)