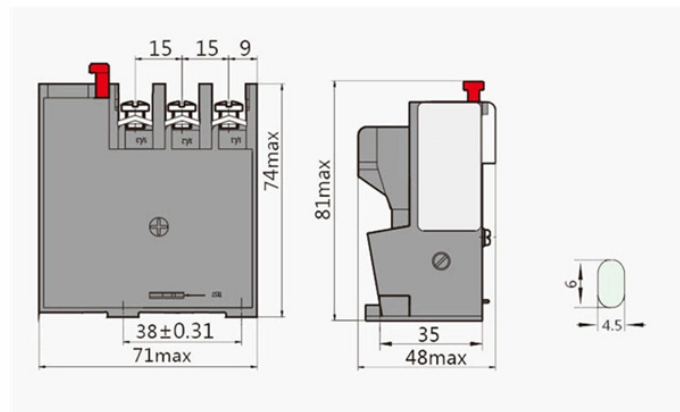


# Coherent Optical Receiver Measurement System



## Overview

It is designed as a reference receiver for transmitter characterization and analysis of IQ modulated optical signals in the C-Band. Available with bandwidth options of 80 GHz, 60 GHz, 40 GHz and 20 GHz, the CORX enables the processing of Terabit-class signals and baud rates beyond. tion assisted by digital signal processing (DSP). Due to limitations in space, it focuses mainly on coherent optical systems usin major. However, over the years, this technology has been increasingly adopted for shorter reach applications, such as Data-Center Interconnect (DCI) and 5G/6G front/backhaul, to overcome physical limitations of Intensity-Modulation/Direct-Detect (IM/DD) as those applications demand higher throughput. The. perator training of the test system in your laboratory or manufacturing facility. Our field application engineers are available on-site to provide expert level support ocess is supported on-site by experienced Tektronix Field Applications Engine he OM2210 provides a true heterodyne stimulus in. Coherent optical receiver for the measurement of coherent modulation formats such as QPSK, 64QAM and OFDM. High-bandwidth, low-noise architecture makes it ideal for high-quality, low-distortion coherent signal measurement. When the frequencies of the LO

and incoming optical field carrier are the same, the baseband signal. The coherent detection technique together with advanced modulation formats, polarization multiplexing, high-speed digital signal processing (DSP) circuits and sophisticated algorithms are the key enablers for the optical communication systems operating at 100 Gb/s and beyond.

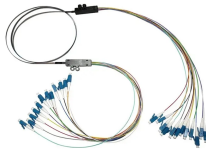
## Coherent Optical Receiver Measurement System



Optical coherent receivers operate on the principle of mixing an incoming optical field (information channel) with a high power local oscillator (LO) signal prior to detection by the photodetector.



It allows the coherent detection of polarization-multiplexed optical signals in the C-Band by mixing the test signal with a built-in local laser oscillator. It is designed as a reference receiver for transmitter ...



The course will cover the steps involved in signal processing and the key parameters used to evaluate signal and system quality. Conversely, characterizing a coherent receiver requires a ...



Equipped with comprehensive control and analysis SW, the PC controls all elements of the system and performs automatic data acquisition, processing and visualization of test results.



Because of the excellent spectral resolution and detection sensitivity, a coherent OSA can be used as an optical system performance monitor, which is able to tell modulation data rates as well ...



Coherent optical receiver for the measurement of coherent modulation formats such as QPSK, 64QAM and OFDM. High-bandwidth, low-noise architecture makes it ideal for high-quality, low-distortion ...



- Optical coherent receiver in a compact 19"-chassis
- Coherent detection of high-speed optical dual-polarization m-PAM and m-QAM signals > 40, > 70 and 110 GHz versions available



In this section, we describe the implementation of the functionalities of the optical M-PSK transmitter and receiver using various photonic devices, i.e., a QM, a balanced receiver, a phase-diversity receiver ...



Because coherent detection retains the phase, amplitude, and polarization information of the signal, such systems are able to handle the polarization demultiplexing in the electrical domain using high ...



The design cycle starts testing electro/optical devices such as dual-polarization IQ modulators, coherent receivers, amplifiers, TIAs and photodiodes. During this phase the components are characterized by ...

## Contact Us

For more information, pricing, or custom network solutions, please contact us:

Website: <https://www.hashherbcafe.co.za>

Email: [hello@hashherbcafe.co.za](mailto:hello@hashherbcafe.co.za)

Phone: +27 63 814 7295

Address: 15 Galaxy Road, Linbro Business Park, Johannesburg, 2065, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

