

Intensity and Phase Measurements for a Wide Range of Pulse Lengths

Measuring Ultrashort Pulses with IQFROG

The IQFROG can be used to measure the intensity and phase of optical pulses in both spectral and temporal domains, giving a complete pulse characterisation. It is based on the principle of frequency-resolved optical gating (spectrally resolved SHG autocorrelation) which allows sub-picosecond resolution since it is not limited by the response time of the detector.

Thanks to its long delay arm and high-resolution spectrometer, the IQFROG is able to measure a wide range of optical pulses lengths; from 300fs, up to 50ps for chirped pulses. The user friendly software recovers all the characteristics of the pulse, including pulse shape, spectrum, chirp and group delay.

The IQFROG is available in 1.0 μ m and 1.5 μ m wavelength versions. The 1 μ m version is an ideal tool for seed laser pulse characterisation in chirped pulse amplification (CPA), while the 1.5 μ m version is suitable for C & L band telecom applications. In both versions a connectorised fibre input makes coupling of the beam easy and eliminates need for manual alignment.

Coherent Solutions is a New Zealand based company specialising in coherent detection, pulse measurement, and modular test and measurement equipment for fibre optic laboratories. In Germany and the UK, its products are exclusively distributed by LASER COMPONENTS.

More Information

www.lasercomponents.com/de-en/product/frog-based-measurement-of-optical-pulses/

The Company

LASER COMPONENTS specializes in the development, manufacture, and sale of components and services in the laser and optoelectronics industry. At LASER COMPONENTS, we have been serving customers since 1982 with sales branches in five different countries. We have been producing in house since 1986 with production facilities in Germany, Canada, and the United States. In-house production makes up approximately half of our sales revenue. A family-run business, we have more than 200 employees worldwide.