Test&Measurement

YOKOGAWA

Yokogawa Seminar



Venue

Yokogawa Deutschland GmbH Broichhofstraße 7 40880 Ratingen Training room E3

Event host: Yokogawa Deutschland GmbH Test- und Messtechnik

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May 21st 2025 9am to 4pm (including lunch and coffee breaks)

Participation is free of charge.

Request participation

The number of participants is limited. Please register in time.

These services are also included in the seminar:

- Seminar documents

- Certificate of attendance

Optical Metrology

May 21st 2025 - Ratingen, Germany

Fundamentals and Capabilities of Modern Optical Spectrum Analysis

What are the different methods of spectral analysis, and which is best suited for specific applications?

Which approach is most effective for characterizing modulated optical signals in the frequency domain?

How can fiber-coupled signals be analyzed with high precision?

In this seminar, we will explore these and other key aspects of optical metrology, complemented by practical measurements on fundamental optical transmission systems, fiber optics, light sources, passive components, and various other optical elements. Beyond the theoretical foundations, hands-on workshops provide practical experience: Perform spectral measurements using an optical spectrum analyzer (OSA), Characterize a visible laser source, Analyze an NRZ-modulated 10G signal, Investigate the cut-off wavelength of single-mode fibers.

Agenda	
09:00 am	Welcome and check-in
09:30 am	Introduction, agenda – Yokogawa company presentation
10:00 am	Fundamentals of optical spectrum analysis Comparison: Monochromator, interferometer and correlated techniques Example measurement using a monochromator
11:00 am	Coffee break
11:15 am	Optical Spectrum Analysis: Stray Light Effects and Zeroing
11:45 am	Monochromator and Air Purge: Water absorption lines and their impact (AQ6375E + white light source)
12:15 pm	Fibre characteristics Cut-off wavelength of single-mode fibers OTDR analysis
12:30 pm	Lunch break
1:30 pm	Light Sources and EDFA: Theory and Practical Applications
2:00 pm	Hands-on WorkshopsStation 1Characterization of a VIS laser with AQ6373EStation 210G modulated signals with AP9950 and AQ6380Station 3Wavelength and SMSR measurement of a DFB laser (AQ2211) with AQ6151B and AQ6370EStation 4Power measurement of a DFB laser with optical power meter (OPM) and AQ6375EStation 5OTDR measurement – fiber bending
3:30 pm	Feedback forms, coffee break, and closing discussion
4:00 pm	End of Seminar