OPERATING FSP 3000
AgileConnect™ with ROADMS

4.5 days technical training

The Fiber Service Platform (FSP) is a family of products that provide comprehensive Optical + Ethernet networking solutions for access, metro core and regional networks. ADVA is focused on the needs of enterprise and service provider customers deploying data, storage, voice and video applications.

Course Description & Level

A training course on ADVA FSP 3000R7 hardware. Including ROADMs and 100G modules. Selected Active Channel Cards, Passive Filters and Optical Amplifiers. Installation specifics. Including Provisioning & Commissioning.

Students will be guided setting up a working system step-by-step - from Point to Point, Multiplexed, Amplified and with ROADMs. Introduction to High Density Shelves.

ESD Instructions, Fiber handling, fiber and port cleaning are also part of this class.

Level: Introductory

Audience and Benefits

- The class is aimed for beginners to WDM as well as experienced users who need to get familiar with ADVA FSP 3000R7 product.
- To achieve self-sufficiency at installation, configuration and maintenance of the FSP 3000 product including ROADMs
- Certificate of attendance; exam available (if applied for)
- Small courses, 8 attendants maximum

Agenda	THEORY	PRACTICE
	• System overview • Component overview • Optical system architectures • Supported topologies and protection mechanism • Management Concepts • DCN • Supported applications • ROADM applications • High Density Shelves	• Setting up a system and its components • Using GUI & ADVA software • Database Backup & Restore • Software upgrade • Implementing DCN • Balancing DWDM Network • Performance Monitoring • Fiber Cleaning/Power Measuring • Troubleshooting

Pre-requisites

The attendees should have basic knowledge of WDM, OTN and TCP/IP.

Upfront the class we will enroll students to around 10 basic eLearning modules on WDM (each with a length of approximately 10 min). We expect students to take the modules before coming to the class.

Contact

Training: training@adva.com

OPERATING FSP 3000
AgileConnect™ with ROADMS

4.5 days technical training

Day 1 **9 am-5 pm**	**Introduction, Course Overview, General Product Overview Management Concepts for FSP 3000R7 platform, Data Communication Network via OSC**
Lab Exercises	• Initial System Settings • First Management Steps • Using Serial Console Management (requires Terminal Program: e.g. 'putty' or similar) • Setting IP parameters for management over LAN/WAN • Managing Basic System Security/Managing User Accounts • FSP 3000R7 Shelf Extension (FSP 3000R7 Shelves only) • Commissioning • DCN applications via Optical Supervisory Channel
Day 2 **9 am-5 pm**	**Provisioning concepts, Active Channel Cards, DCN via ECC**
Lab Exercises	• Auto-, Post- and Pre-Provisioning • Application of selected Active Channel Cards including 100G cards (typically 10TCE 100G card) • Setting Software Loops for Troubleshooting • DCN applications via Embedded Communication Channel
Day 3 **9 am-5 pm**	**Passive Optical Filters, System and Database Management, Protection in Optical Networks**
Lab Exercises	• Create passive Filter Structure • System Database Backup and Restore • Software Upgrade • Firmware Update • NCU Exchange • Applications of selected protection scenarios
Day 4 **9 am-5 pm**	**Optical Amplifiers (EDFA, Raman) and Dispersion Compensation, ROADM**
Lab Exercises	• Application of selected Erbium-Doped Fiber Amplifier (EDFA) without Raman • Application of selected ROADMs
Day 5 **9 am-1 pm**	**100G Modules; Subtending HD Shelves**
Lab Exercises	• Setup a 100G Active Channel Card • Slide presentation only for HD Shelves

Additional Exercises throughout the course.

- Following ESD rules
- Using Optical Power Meters, Optical Spectrum Analyzers and other Tools for M&T (if available)
- Using Built-In Tools & Documentation for Maintenance and Troubleshooting
- Managing Alarm Profiles and System Logs
- Finding Failures Using "Follow The Light" Procedure
- Using Loops for M&T
- HW&SW Troubleshooting Cases

Gathering Info for ADVA CTAC Service Teams