

## Introduction to PDH (T-Carrier) and Datacom Testing

This one-day course covers T1 and datacom technologies, as well as how to test circuits and access equipment with a Puma. The hands-on part of the training focuses on practical operation of the unit so as to put it to immediate use.

### Content

#### Part 1: Theory of PDH and Datacom Testing

- Overview of PDH and STS-1 technologies (framing, line coding, etc.)
- FDL, SSM/BOM and loopback techniques
- Basic datacom technology

#### Part 2: Testing Applications Using EXFO's Puma

- The Puma: connection panels, front panel and screens
- Connection techniques
- Menu systems
- Test modes
- Telecom monitoring modes and BERT testing functions
- Other basic test modes: voice/frequency, propagation delay and async testing
- Optional test modes: frame relay, ISDN monitoring and call placement, etc.
- Software upgrade process

### Pre-Requisites

- Basic understanding of PDH telecom and datacom technology

### Methodology

The first part of this course consists of lectures using PowerPoint presentations and demonstrations, while the second part consists of specific hands-on test exercises using the Puma equipment.

**Typical Schedule** (can be modified to accommodate attendees' working schedule)

INTRODUCTION TO PDH (T-CARRIER) AND DATACOM TESTING	
<b>8:00 a.m. to 12:00 p.m.</b>	<p><b>Part 1: Theory of PDH and Datacom Testing</b></p> <ul style="list-style-type: none"> <li>— Telecom and datacom technologies</li> <li>— Puma platform range</li> </ul> <p><b>Part 2: Testing Applications Using EXFO's Puma</b></p> <ul style="list-style-type: none"> <li>— Using the Puma: rear connection panels, front panel controls and screen, navigating around the menus</li> <li>— Test mode selection and interface setup</li> <li>— T1 monitor test mode</li> <li>— Hands-on session</li> </ul>
<b>12:00 p.m. to 1:00 p.m.</b>	<b>Lunch</b>
<b>1:00 p.m. to 5:00 p.m.</b>	<p><b>Part 2: Testing Applications Using EXFO's Puma (continued)</b></p> <ul style="list-style-type: none"> <li>— BERT testing, setup, result screens, features, telecom and datacom interfaces</li> <li>— Voice/frequency testing</li> <li>— Propagation delay and other test modes</li> <li>— Software upgrade and installation options</li> <li>— Hands-on session</li> </ul>

**Documentation**

Attendees will receive a binder containing copies of presentations and other printed handouts, if applicable.

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