

CMT-07-023

COMBO OTDR & FIBRE OPTIC JOINT ENCLOSURE ASSEMBLY

Training Course

5 DAYS DURATION - DESIGNED FOR ALL SKILL LEVELS

“Telecommunications training that provides knowledge plus experience.”



CELEMETRIX
the art of measurement



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Telstra *Certified*

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COURSE OUTLINE

CMT-07-023-A

Introduction to Fibre Optics

1. Understanding Telecommunications network architecture
2. Basics of Fibre Optics – Units of measurement
3. Singlemode and Multimode cable principles and naming & colour codes
4. Light Propagation principles
5. Laser Transmission System Theory
6. Optical Connectors and pigtails
7. Laser Safety and OH&S
8. Fibre optic cleaning principles
9. Operating optical microscopes/VIPs
10. Operating Traffic Identifiers
11. Operating Visual Fault locators
12. Practical exercises to reinforce theory elements.

CMT-07-023-B

Fibre Optic Splicing Principles

1. Splicing methods and technologies
2. Splicing tooling requirements
3. Matching splice protectors to splicing trays
4. Fibre optic cleaning process for splicing
5. Fibre optic cleaving process for splicing
6. Fusion splicing techniques and acceptable limited of operation
7. Practical exercises to reinforce above elements.

CMT-07-023-C

Fibre Optic Cable Construction

1. Cable Types used with a carrier environment
2. Cable markings and definition
3. Complete Fibre Optic cable numbering system
4. Techniques for stripping cable protective coatings
5. Practical exercises to reinforce above elements.

CMT-07-023-D

Fibre Optic Joint Enclosure Assembly Principles (Select 2 of the following enclosures)

1. Assembly methodologies for Egerton 24/72 joint enclosure
2. Assembly methodologies for Corning UCNCP 9-24 MAX joint enclosure
3. Assembly methodologies for Corning UCNCP 7-20/ 9-20 joint enclosures
4. Assembly methodologies for Corning 24F OJ joint enclosure

5. Assembly methodologies for Fibernet Tap 2 (internal) joint enclosure
6. Assembly methodologies for Warren & Brown 2 Draw OFDF (internal) joint enclosure
7. Practical exercises to reinforce above elements.

CMT-07-023-E

Acquiring a suitable and accurate OTDR trace

1. Index of Refraction
2. Pulse Width Selection
3. Deadzone effects on an OTDR trace
4. Selecting the most suitable Range and resolution Setting
5. OTDR Trace Acquisition time
6. Wavelength test selection
7. Practical exercises to reinforce above elements.

CMT-07-023-F

Evaluating OTDR trace elements

1. OTDR Trace Basics
2. OTDR Trace elements
3. Measuring OTDR trace features using an OTDR
4. OTDR Fault Conditions – Trace examples provided
5. Effects of Incorrect OTDR parameter setup
6. Ghosting & Gainers
7. Techniques for accurate fault locating
8. Practical exercises to reinforce above elements.

CMT-07-023-G

Evaluating Overall Link Quality

1. Understanding network testing thresholds
2. Calculating loss/attenuation budgets
3. File naming conventions and trace file formats/structure
4. Measuring optical insertion loss
5. Evaluate an optical connector using an optical microscope and/or VIP
6. Determine the effectiveness of other fibre optic testing tools including - VFL, BFA, Traffic Identifier etc
7. Creating a professional and accurate optic link performance report using the Telstra Workbook and how this relates to Multiman
8. Introduction to "Networks" PC Emulation Software
9. Practical exercises to reinforce above elements.

CMT-07-023-H

Course Assessment

1. Theoretical assessment
2. Practical assessment – Complete an optical report using supplied traces.

CMT-07-023 COMBO OTDR & FIBRE OPTIC JOINT ENCLOSURE ASSEMBLY**COURSE OVERVIEW**

Designed for all skill levels – Provides each attendee an opportunity to secure the skills required to confidently install fibre optic joint enclosures used within a carrier network and splice fibre optic cores and assess link quality to Telstra standards.

Each attendee will construct two carrier certified fibre optic joint enclosures. These are chosen to incorporate all the disciplines needed to confidently assemble most joint enclosures available and splice fibre optic cores without causing fault conditions.

10 -15 people per course.

Training is available throughout Australia.

COURSE INFORMATION

Course locations: Melbourne, Adelaide, Sydney, Hobart, Canberra, Cairns, Brisbane, Darwin & Perth.

Course times: 8.30am to 4.30pm.

Duration: Five days.

Training is available Australia-wide. Please contact Celemetrix for details.

Included: Instructor, data projector, splicing equipment, joint enclosures, OTDR's, general test equipment & training manual per attendee.

INDUSTRY PROBLEM

- The telecommunication industry has seen a decline of the transfer of skills from experienced technical personnel to new personnel.
- Knowledge transfer to complete projects to the required quality/time standards has become increasingly scarce.

CELEMETRIX SOLUTION

- Training programs are designed to protect against poor quality network builds, which result in costly rework and service interruptions.
- Emphasis on the importance of maintaining standardised installation and commissioning practices.
- Skill in the transference of knowledge is what we believe to be the "art of training".

- Unlike other training organisations which focus primarily on technology - Celemetrix Training Services are structured toward Field Operations staff. Technology theory is combined with practical elements to reinforce the learning process.
- Specifically designed training manuals, enhanced practical exercises and technical phone support ensure your investment delivers increased levels of productivity and confidence.
- All our training courses can be customised to meet your individual requirements.

All our trainers are qualified with Cert IV Assessment and Workplace Training from Corporate Training Australia.

FURTHER INFORMATION

Call or email Celemetrix today, our courses result in the highest knowledge transfer and are Telstra Certified.

Telstra Certified



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