Connectix Cabling Systems™
PON Theory Training

Correct installation procedures are a fundamental part of today's structured cabling industry. We are committed to ensuring that our cabling systems are installed quickly, professionally and in compliance with the rapidly changing standards proposed by the ISO/IEC, EIA/TIA and CENELEC. Modern building designs often include consideration for cabling infrastructures to support voice and data distribution. It is increasingly the case that tender documents, project specifications and detailed plans make reference to relevant standards and terminology that anyone working in this field should be aware of. Passive Optical Networks are a way of cabling sites/premises/users without the need, in the majority of cases for traditional Copper cabling or distributed active equipment.

Course Description

PN01 is a three hour PON (Passive Optical Networks) theory based course with the following key elements. A mainly theoretical presentation but with worked examples, some practical demonstrations by the tutor are used to relate theory to real world scenarios.

Features and Benefits

- Gives delegates the confidence to understand and design PON systems correctly.
- Coverage of industry standards, installation techniques and test equipment
- Introduction to typical PON system infrastructure elements.
- A certificate issued upon successful completion of the online test

Introduction to Connectix

- Background, History and activities
- Information with regards to Warranties

Course Introduction

- Housekeeping, Course materials, objectives, test information

Pre- Requisites

- It is anticipated that delegates would have a Prior knowledge of basic fibre optic technology, Jargon, components and cables

PON Considerations

- Is it time for a change from Copper ?
- Comparing PON,POL,BPON,GPON and EPON options
- FTTH using P2P active links (via UTP final drops)
- PON to MDU's via splitters
- 10G ready FTTH
- Examples of POL systems/savings
- How big can a PON be ?
- Network management/security and reliability
- PON Cabling vs Structured Cabling

PON Components and Criteria for Consideration

- Low reflectance connectors such as APC
- Bend Insensitive Fibre
- Wall mounted discrete box or Cabinet type 19 inch splitters (or both ?)
- Fusion splice, mechanical splice, preterminated 1 end or both ends (or a combination)?
- OLT Optical Line Terminal options
- ONT Optical Network Terminal Options
- Zone Cabling products

Fibre IRS systems

- Similar planning to GPON
- Key components
- Options when installing GPON and FIRS together
- Estimating

PON Design Process

- Splitter location and type
- Alternate Design options
- Component and cable selection
- Loss budgets
- Estimating
- Testing plan
- Engineers qualifications

PON Testing

- Why test? What to test?
- Methods of testing
- Wavelengths 1310,1490,1550 ?
- Different types of test equipment
- Options for OTDR testing

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