

Application Note

Visually Locating Fiber Losses and Confirming Fiber Continuity

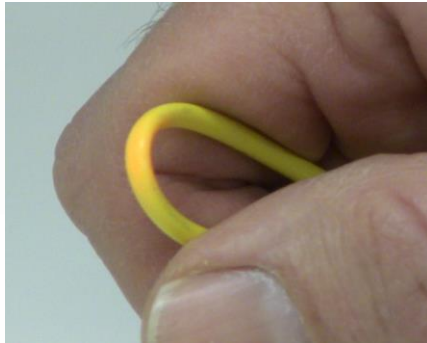
Introduction

The Tempo Communications 180XL Visual Fault Locator (VFL) can be used to visually locate loss locations on fiber links and can also be used to confirm fiber continuity.

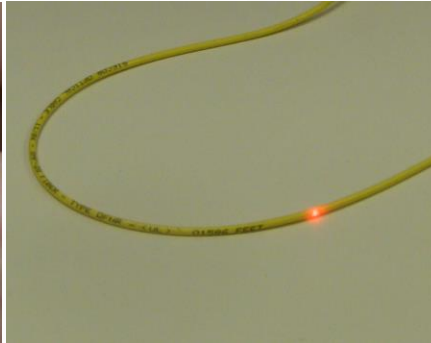


Visually Locating Loss locations and Fiber Breaks

The 180XL is connected to a fiber cable and the technician can visually locate loss locations be it a Macrobend, faulty connectors, a break in the fiber or a poor splice. When there is a fiber discontinuity the red laser light escapes the fiber and the technician can then visually identify the loss location. The 180XL can be placed into modulation mode, the red laser light is then modulated at a rate of 2Hz. This aids in the identification of loss events.



Macrobend



Fiber Break

Visually Identify Fibers

The technician can connect the 180XL on one end of a fiber and then visually locate the other end of the fiber. The red light will be visibly emitted from the end of the fiber and indicates that the fiber does have continuity but it does not confirm that the fiber has no loss. The maximum transmission distance of the 180XL is 5km in single mode fiber. The technician should not look directly into the fiber so as to avoid possible eye injury. The 180XL is Class 2 compliant and is safe as specified by CDRH FDA standards.

Summary

The 180XL visual fault locator:

- Locates Macrobends, faulty connectors, poor splices and breaks in the fiber.
- Identifies the ends of fibers validating fiber continuity.