Fiber Break Monitoring System (FBMS)

Telecommunication companies have been spending billions of ringgit to build fiber optic network as part of their efforts in improving the quality of services provided to the customers. They also have to ensure that there would not be any interruption in services as it might mean a loss of clients to their competitors. Thus, the requirement for a technique to locate the fault cannot be over-emphasized. The current approach uses a system known as Remote Fiber Testing System (RFTS) or Remote Fiber Monitoring System (RFMS) which is based on a monitoring device, optical time domain reflectometer (OTDR). OTDR requires a separate light source and uses a different fiber, which is thus, both expensive and wasteful. Therefore, there is a real need for a simpler, significantly less expensive yet accurate technique in place of the OTDR –based RFTS.

Fiber Break Monitoring System (FBMS) is a product designed and developed by UPM to replace the existing systems at a much more affordable cost. It can now support per-fiber monitoring rather per-cable monitoring as it is. This ensures the condition of each fiber rather than assuming based on a representative fiber in the cable. FBMS will immediately display the location of the fiber break in less than 2 seconds after the break occurs. The product can also automatically send an alarm message to the operation/maintenance personnel. This will help the companies to reduce down-time cost considerably.

Lab prototype

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