## Universiti Putra Malaysia

## **Portable Fiber Optic Based Lightening Detection System**



The portable fiber optic-based lightning detector system is used to provide a reliable system (affordable, accurate, emits less noise and causes less interference), which is capable of monitoring, detecting and storing automatically, the data of the lightning profile. A photo detector is applied to the front-end of the system as the sensing element for the lightning flash. The system uses fiber optic as its transmission system to transmit the data from the lightning detector to the analog receiver at the other

end of the fiber optic. A Programmable Logic Controller (PLC) that is part of the system is used to collect and store the data with the time and the date of occurrences, and this data can be viewed or retrieved through the personal computer (PC).

The system can be operated in two modes namely off-line and on-line modes. In the off-line mode, the system operates independently to record the data at designated and remote site. There is no computer connected to the system during its data recording activity. The system will record the lightning activities for a predetermined period. After this period, the user can come and collect the data. The PC is then connected to the system to retrieve the data. In the on-line mode, the system is linked to the server database directly via an Internet. Many systems can be linked to the server database. The data is recorded and compiled automatically and continuously to the server database.



Lightening Detection System

The product has won several medals and is patent-pending under Malaysian Patent registration number PI 20020851.

## For further information, kindly contact:

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