Method of information security monitoring of fiber optic link

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The basis of this work is the results of research on the development of the method of detection and localization of the site of unauthorized access for the fiber-optic communication line. We studied functioning of the fiber-optic line in emergency conditions. On the basis of analytical review of methods of unauthorized access to the optical fiber we propose a developed method of detection and localization of the site of leakage radiation from the optical fiber. The method consists in applying a laser phase rangefinder as a device for monitoring the information security. It is shown that application of classical laser phase rangefinders allows to achieve localization accuracy up to several centimeters.

Keywords: optical fiber, radiation leakage, monitoring, information security, laser rangefinder.

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