

The adaptive fire detection method includes setting an initial fire detection threshold, measuring the current value of an arbitrary dangerous fire factor, calculating the difference between the current values of the dangerous fire factor and the current values of the adaptive threshold, determining the asymmetric unit function from the calculated current difference. The current value of the adaptive threshold is determined by exponential filtering with a larger value of the fixed parameter of the current asymmetric unit function with a fixed weight and taking into account the initial threshold, and the current reliability - the probability of fire detection - is estimated by exponential filtering with a smaller value of the fixed parameter of the current asymmetric unit function.