

The Study about the New Monitoring System of Signal Equipment of Railways Using Radio Communication

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Abstract : In our company, the monitoring system for signal equipment has already implemented. So, we can know the state of signal equipment, sitting in the control room or the maintenance center. But this system was installed over 20 years ago, so it cannot stand the needs such as 'more stable operation', 'broadband data transfer', 'easy construction and easy maintenance'. To satisfy these needs, we studied the monitoring system using radio communication as a new method which can realize the operation in the terrible environment along railroads. In these studies, we have developed the terminals and repeaters based on the ZigBee protocol and have implemented the application using two different radio bands simultaneously. At last, we got the good results from the fundamental examinations using the developed equipment.

Keywords : monitoring, radio communication, 2 bands, ZigBee

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