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Abstract: Analysis of Networked RFID System Reliability

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Abstract

The ability to uniquely identify individual objects is essential in many applications such as manufacturing, distribution logistics, access control, anti-counterfeiting and healthcare. Radio Frequency Identification (RFID) technology provides one solution for automatic identification of entities using radio waves. Although there is considerable potential in deploying RFID technology, reliability is a key challenge that requires careful attention for RFID to deliver its inherent benefits. In this paper, we highlight the reliability challenges in RFID technology and we analyze the reliability aspects of RFID technology and their major causes. We will also discuss techniques to improve the reliability of RFID systems.