

two times. Thus, the sensing information read from the RFID reader is prevent to be tampered and also to prevent the basic information of RFID to be tampered with or cloned.

6. Conclusions

This paper analyzes the performance of smart chip, and proposes that the lightweight encryption technology is the only way to build the security protocol for perception layer of IoT. This scheme uses the security single-key management technology to solve the update problem for key update of lightweight cryptography. In the smart chip of sensing device end, sensing device authentication protocol for sensing device end and signature/encryption protocol are built. In the encrypt card of authentication center end, sensing device authentication protocol for authentication center end, decryption/verification protocol are built. All these security protocols ensure the sensing device credible, true and not replaced and ensure the sensing information credible, integrate, not be tampered with and confidential. Thus the perception layer information security system of IoT is established and promotes the establishment of our country's smart city.

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8. References

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