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(57) Abstract:

The present disclosure relates generally to field of Internet of Things (IoT) networks. More specifically the present invention relates to a self-configuration key management system for enhancing the security of IoT networks. The system (100) includes a key generation device (102), a secure key exchange protocol (104), an authentication mechanism (106), a key distribution device (108), a dynamic key provisioning unit (110) and a key management and revocation mechanism (112). The key generation device (102) is embedded with symmetric or asymmetric cryptographic algorithm configured to generate a plurality of cryptographic keys for encryption, decryption, and authentication within IoT network. The dynamic key provisioning unit (110) is configured to facilitate the addition, removal or replacement of IoT devices. Further the present invention relates to a method for self-configuration key management in IoT networks. Advantageously, the present invention relates to a scalable, adaptable, and efficient system and method for securing IoT networks.

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