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Drones in Smart-Cities

Security and Performance

2020, Pages 37-55

Chapter Three - Emerging use of UAV's: secure communication protocol issues and challenges

Navid Ali Khan, Noor Zaman Jhanjhi, Sarfraz Nawaz Brohi, Anand Nayyar

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<https://doi.org/10.1016/B978-0-12-819972-5.00003-3>

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Abstract

In recent years, unmanned aerial vehicles (UAVs)/drones have gained popularity in many areas due to their widely used applications. They are used extensively in military and civil applications such as search and rescue, reconnaissance, monitoring of the environment and traffic, entertainment, and logistics. UAVs usually operate with the assistance of various communication protocols, such as MAVLink, UranusLink, UAVCan, from a remote control or a ground control station (GCS). These protocols of communication are used for messages exchange. These messages contain important UAV status information and control commands

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standards for the communication of UAVs are met. This chapter gives an overview of UAV, their working mechanism, types, different communication protocols which are used for communication among UAVs. It also discusses the issues related to these communication protocols and propose a new secure communication protocol for UAVs.

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Keywords

UAVs; drones; security; commination protocols

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