

結合 RFID 與 e-GPS 應用於地籍測量之研究

Combination of FRID and e-GPS Applied to Cadastral Surveying

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摘要

RFID 是一種非接觸式的射頻辨識系統，具有讀取、寫入、記憶及無線通信等機能，目前多應用於物流倉儲管理，若應用其 UID 的特性並與測量樁/標相結合，可以提供測量樁/標的辨識及資料提取，使測量樁/標成為會表明身分的智慧型測量樁/標。e-GPS 是結合 GPS 高精度定位能力與通訊技術的即時動態測量方法，具有高精度的點位導引和復位能力。若將 RFID 與 e-GPS 兩項技術相結合，並應用於地籍測量業務中，可充分發揮其導引能力、辨識能力、復原能力、點位資料處理能力，加速地籍測量作業效率，在工作上管理上將更臻便利性，同時也不影響現有地籍測量的作業程序。

關鍵字：RFID，e-GPS，地籍測量

Abstract

RFID is a non-contact frequency identification system capable of reading, writing and storing information, as well as radio communication; this technology is used widely nowadays in logistical, warehouse management. If the built-in UID feature can be combined with surveying piles/marks to provide identification and data retrieval capabilities, then they may become "intelligent" piles/marks able to identify themselves. e-GPS is a real-time, dynamic surveying method applying the ultra precise positioning capability of GPS and communication technologies, having the abilities of point guidance and resetting. If RFID and e-GPS can be combined and applied in cadastral surveying tasks, then their capabilities of guidance, identification, reset and point data processing may enhance the efficiency of cadastral survey, so that the management may be more convenient, and current operating procedures of cadastral surveying may be unaffected.

Keywords: RFID, e-GPS, Cadastral Surveying

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