

Programming an RFID reader for getting data from different semi-passive sensor tags

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Abstract

Alien ALH-9010 is a PDA built on the Microsoft Windows Mobile 6.5 operating system and equipped with a full featured 900 MHz RFID tag reader. It is able to inventory, selectively read from, and write to tags which support the EPC Gen2 protocol. The demo software developed by the producer suggests that this handheld enables users to deploy different inventory software for making inventory work faster and cost-effective.

Can we use this PDA only for inventory and automatic identification? In this paper we demonstrate the way of developing .NET software that enables this handheld to be able to read any data including temperature data from any semi-passive sensor tags working in UHF range, such as CAEN 927Z or CAEN Easy2Log if they support EPC Gen2 protocol.

Keywords: RFID, API, PDA programming, ALH-9010, CAEN tags, .NET