

RFID BASED MISSING WEAPONS REPORTING ROBOT WITH REAL TIME BIDIRECTIONAL WIRELESS DATA TRANSFER

ABSTRACT:

In a military unit all the weapons are generally stored in a large barrack type arrangement which is a big hall containing all weapons and ammunitions. Monitoring this place continuously is of utmost importance. Both during peace time and war time the weapons storage facility is continuously monitored to ensure that no weapons go missing. This process of checking whether weapons are missing is a tedious and a time consuming work and is also prone to human errors and mistakes. The microcontroller on the robot is programmed to scan the entire location. So when the robot is placed in the room and turned on, it automatically moves through every part of the room. While the robot is passing through the room, it picks up the details of the RFID tags attached on the weapons.

So as it moves it collects information of the weapons that are present in the room. This information is transmitted as and when it is collected to a central monitoring in such as a PC.

For viewing the details a VB program is used which automatically creates a list of all the weapons present from the information received from the robot. Further the application can be extended to connect to a data base of all the weapons that are issued out. Using this information the VB program can easily compare the details of the weapons present, and the weapons that have been issued out. After comparing it can easily generate a report of the actually missing weapons.