

## RFID for Automobile

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A new car immobilizer system uses three RFID readers to make it tougher for thieves to drive off with your automobile. RFID security systems installed in new vehicles by car manufacturers have succeeded in reducing car thefts, according to statistics gathered by immobilizer manufacturers. These RFID security systems work by fitting a car's ignition key with a passive RFID transponder containing a unique ID code. Whenever the key is inserted into the ignition switch, it activates an RFID reader connected to a control module in the engine's central computer (which controls such things as the car's ignition and fuel systems) and is wired to an antenna built into the vehicle's steering column. The RFID reader generates a random number, which is transmitted to the key. The key's transponder combines the random number with its own unique serial number, encrypts the new number and transmits it back to the car's RFID reader. If the numbers don't match, the car won't start.