

Issue Date:  
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## SENSORS FOR AUTOMATED TELLER MACHINES

### Automated Teller Machine Application

Automated Teller Machines (ATM's) have a currency bill dispensing mechanism that counts each bill as it exits the dispenser. The mechanism also evaluates the thickness of the currency. If a bill is folded, torn or two bills are stuck together then, the currency is diverted to a rejection bin.



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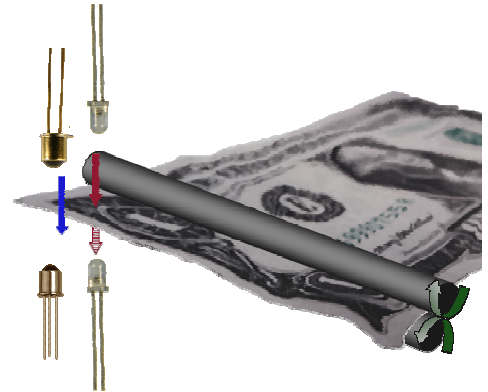
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### Automated Teller Machine Requirements

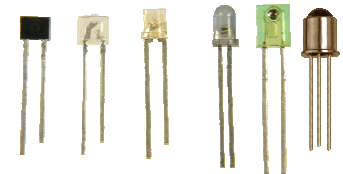
As the bill is pulled through, the detector generates an analog 'signature' that is representative of features on the bill. The output is compared to a stored 'electronic signature' of a known sample to validate the bill. The mechanism ensures that every bill is extracted from the bill dispenser. A non-contact reflective sensor can be used to ensure that every bill dispensed is extracted from the ATM.



### The sensor solution from OPTEK

#### LED and Photosensor Pair

- Available in both hermetic and plastic packages.
- Extensive selection of through-hole and surface mount package configurations.
- Special selections and custom designs are also available.



Through-hole Pairs



Surface Mount Pairs

#### OPB608 / OPB706 Reflective Object Sensor

- Sensor will respond only when an object is within its field of view.
- Unfocused for sensing diffused surface.
- Enhanced signal to noise ratio.
- Low cost compact packages.



OPB608 / OPB706 Reflective Object Sensor

OPTEK Technology is a leading provider of custom sensing solutions which incorporate the use of infrared, visible light, magnetic and fiber optic technologies focused on applications in office machines, industrial equipment, encoders, automotive electronics, military and high-reliability applications and medical diagnostic equipment.