#### **MEDICAL APPLICATIONS**

# Automatic Blood Analyzer

## PRODUCTS



2SS52M (leaded) or SS552MT (surface mount, to be released July 2002)

### **BENEFITS:**

- The sensor is very small in size and can be mounted on a printed circuit board
- Low-gauss operation can extend sensing distance to 1 in or more, depending on magnet strength
- This sensor can be activated with either a north or south magnetic field
- Standard digital sinking output makes it easy to interface with most electronic circuits
- Accepts a wide supply voltage range of 3.8 V to 30 V, so it can use most available supply sources

## CONTACT US

For application assistance, current specifications or name of the nearest Authorized Distributor, check the Honeywell web site or call:

1-800-537-6945 USA 1-800-737-3360 Canada 1-815-235-6847 International

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INTERNET www.honeywell.com/sensing info.sc@honeywell.com

### BACKGROUND:

Advanced blood analysis, or hematology, is now possible in doctors' offices, as well as sophisticated laboratories. From just a drop of a patient's blood, an automatic blood analyzer can perform one of hundreds of possible tests, such as a complete blood count (CBC), often in just minutes.

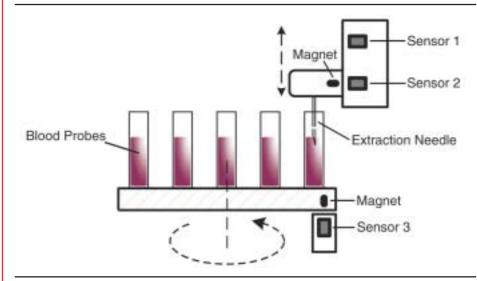
## SOLUTION:

Blood analysis is typically conducted with a series of rotating blood probes from which an extraction needle, or pipette, removes samples. Designers of automatic blood analyzers must find a reliable solution for sensing position in a non-contact, mechanical system. To control the automated mechanisms, you can install a series of 2SS52M Series omnipolar magnetoresistive sensors, as demonstrated in Figure 1:

- Sensors 1 and 2 detect the upper and lower positions of the extraction needle.
- Sensor 3 controls the end position of the blood probe holder.

A fourth sensor (not shown) is used as an interlock switch for the front door of the analyzer

#### 2SS52M Series position sensors detecting the movement of a blood analyzer.



# Additional Mass Airflow Sensor product information is available on the Web at:

http://content.honeywell.com/sensing/prodinfos/solidstate/