

## MEDICAL APPLICATIONS

# Blood Pressure Monitoring Using the 26PC SMT

## PRODUCT



26PC SMT Series

## CONTACT US

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## BACKGROUND

Blood pressure monitors measure the pressure flowing through the blood vessels against the walls of the arteries. If blood flow is normal, then blood pressure is normal (average 120/80). If blood flow becomes restricted in some way, blood pressure goes up. If increased blood pressure goes undetected, the person is at risk of severe medical problems.

## APPLICATION

The most common method for measuring blood pressure is with a pressure cuff hooked to a mercury manometer. A health care professional manually pumps the cuff to put pressure on the artery. He or she then uses a stethoscope to time the noise of the blood rushing through the artery (onset is systolic pressure), and the noise of the blood slowing to the resting mode (diastolic pressure).

Today, blood pressure monitoring has become much easier and more efficient due to automated monitoring equipment. This equipment currently is in place at most hospitals and pharmacies. To simplify the process even more, an "at-home" solid-state blood pressure monitor is now available. This trend toward smaller, more portable medical equipment has resulted in the need for smaller electronics to control and operate the equipment.

## HONEYWELL'S SOLUTIONS TO CUSTOMERS' NEEDS

Honeywell offers the 26PC SMT (Surface Mount Technology) Series pressure sensor. This small, low-cost, high-value pressure sensing solution takes the place of the health care professional having to place a stethoscope under the pressure cuff to *hear* the noise of the rushing blood. The sensor measures blood pressure faster and more accurately than manual devices, and is used directly with printed circuit boards (PCBs). The blood pressure monitor has an on-board processor to cycle through the test, record results and output the results to a digital read-out screen. Instead of watching the mercury fall in the manometer, the pressure sensor acts as the mechanism to provide a visual aid and noise monitor of the pulse of blood flowing through the arteries.

Based on the long-established reliability and accuracy of Honeywell's 26PC pressure sensor, the 26PC SMT offers reduced size with true surface-mount capability. This means lower installation costs to the customer. Cost also is contained because the sensor uses only five components and incorporates one, simple assembly process.

The calibrated 26PC SMT is easy to use and works in conjunction with Honeywell's functional switches. These switches "zero out" the monitor (automatically setting the reading back to zero), reducing the need for operator interface.

***Additional Pressure Sensor information is available on the web at:***  
<http://content.honeywell.com/sensing/prodinfo/pressure/>