Supplementary Information


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**Figure S1.** Multiplexor with sensor inputs VO1-VO6. Wixel module is included for wireless transmission of data.
**Figure S2.** Electronic configuration used for each sensor.

**Bending effect on pressure measurements.**

68.37 mm Hg reference.

\[
\begin{array}{ccc}
\text{r} & \text{73.05 mm Hg} & \text{106.85 %} \\
\text{r} & \text{78.04} & \text{114.14 %} \\
\text{r} & \text{79.42} & \text{116.16 %} \\
\text{r} & \text{85.29} & \text{124.76 %}
\end{array}
\]

**Figure S3.** Measurement variations with respect to sensor bending.

**Table S1.** Component details for the developed circuit shown in Figures 6 and 7.

<table>
<thead>
<tr>
<th>Name on Schematic</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1–S6</td>
<td>Tekscan’s FlexiForce® A401-25 Force Sensors</td>
</tr>
<tr>
<td>SN54LV4051A</td>
<td>CMOS Analog Multiplexer</td>
</tr>
<tr>
<td>WIXEL</td>
<td>Polulu Wixel©</td>
</tr>
<tr>
<td>MCP6004</td>
<td>Op-amp</td>
</tr>
<tr>
<td>R1-R6</td>
<td>20k Resistor (1% tolerance)</td>
</tr>
<tr>
<td>R8</td>
<td>2.2k Resistor (1% tolerance)</td>
</tr>
<tr>
<td>R7</td>
<td>1.8k Resistor (5% tolerance)</td>
</tr>
</tbody>
</table>

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