

# **Digital Barometer**

#### **About**

Portable Barometer uses a silicon resonant pressure sensor DPS 8100 producing a pressure reading in pressure measurement units and pressure altitude. It also has a Comptek 10.1" tablet, mounted on an Aluminum enclosure. It can be used as a hand-held indicator tablet or instrument. The instrument can also communicate through a USB connector to extract out logged data. This USB port should be strictly used for App-related data transfer only. The instrument has an in-built tablet which should be used only for the TERPS App. The tablet is provided with a compatible charging adapter. This should be used only to charge the instrument. The instrument should be used within the operating and maximum safe working pressure conditions. Refer to the specification section in this manual for the details.

#### **Sensor Port:**

Keep the sensor port clean all the time. Protect the sensor against moisture, water, dirt and dust particles.

Do not block the sensor with any object as it may result in inaccurate reading output.

For better and accurate readings, keep the sensor port away from continuous pressure changing areas (for example, should not be close to AC, Fans, table fans etc.).

During pressure measurement, the device should be placed on the table or held in the orientation.

In case of hand-held application, hold the instrument as shown in Figure 3. While holding the unit, ensure that the hand does not block the sensor port.



### **USB Port:**

This USB Port is specifically for extracting the exported data from the TERPS App. Do not use this port for any other activity. Use this port only for Apprelated data transfer. When not in use, close the USB port using the rubber cap.





## **TECHNICAL DETAILS**

Pressure Range:	600 mbar to 1150 mbar absolute
Accuracy:	±0.1 mbar (over the compensated temperature range)
Compensated Temperature Range: -	10°C to +50°C
Stability:	±100 ppm FS/Year
Resolution:	0.01 hPa
Maximum safe working pressure:	2300 mbar
Sensor casing material:	Stainless Steel
Pressure Medium:	Non-condensing dry gases compatible with 316L Stainless Steel, silicon, silicon dioxide, Fluoro silicon RV adhesive and glass
Display	10.1" IPS TFT LCD HD 1280×800 (IPS+HD+300ANSI), G+G Multi-Touch Module
Storage & Memory	32GB
Pointing Device	Touchscreen - Capacitive multi-touch screen
Ingress protection Power	IP65 Rechargeable lithium ion polymer, 12000mAh/3.7V, 8 hours, DC 12V/3A Adapter



# **Application**

Portable Barometer device is used in Indian Airforce for a silicon resonant pressure sensor DPS 8100 producing a pressure reading in pressure measurement units and pressure altitude. It also has a Comptek 10.1" tablet, mounted on an Aluminum enclosure. It can be used as a hand-held indicator tablet or instrument. Portable Barometer device is used in Indian Airforce.

