

# Indigenous Pulse Oximeters

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Mitocon Biomed launched a purely India-made pulse oximeter named Oxysat at an affordable price, with 18 months replacement warranty.

## Oxysat

With the **COVID-19 crisis** still looming large, and the imports being hit due to **tensions with China**, Indian manufacturers are taking over the reins. They are investing heavily in infrastructure and recalling migrant workers, in an attempt to tackle this crisis. Since the demand for Pulse Oximeters grew, their price has surged from ₹3000 to about ₹4000. Sellers usually attribute the exorbitant prices to foreign imports, and a control on the supply, which further stretches the final retail cost.

Pulse Oximeters are **tiny fingertip devices** that can give valuable information about health during a bout of Covid-19 or any respiratory illness. It looks sort of like a chip clip or a big clothes pin. One has to place the finger snugly inside (most require nail side up), and within seconds it lights up with numbers **indicating the blood oxygen level and heart rate**.

Most healthy people will get an **oxygen reading around 95 to 98 %**. Some people with existing health conditions may have a lower normal reading. One should check in with your doctor if the number falls to 92 or lower. The device will also show your heart rate. A **normal resting heart rate** for adults ranges from about **60 to 100 beats per minute**, although athletes with a higher cardiovascular fitness will have a lower pulse.

## Pulse Oximeter

When one inserts a finger into a pulse oximeter, it **beams**

different wavelengths of light through the finger. It's targeting hemoglobin, a protein molecule in the blood that carries oxygen. Hemoglobin absorbs different amounts and wavelengths of light depending on the level of oxygen it's carrying. The pulse oximeter will give a numerical reading – a percentage that indicates the level of oxygen saturation in the blood.