**Infrared (IR) proximity sensor**

IR is a light with wavelength that is not visible to human eyes but cameras can see it. It is used in many applications, such as TV remote and Night-vision cameras.  
  
In a Proximity Sensor, an IR LED and a Photodiode are used to detect obstacles. The IR LED transmits light in forward direction. When an obstacle is ahead, the light reflects and the Photodiode is activated. By this method, an obstacle is detected. Finally, the sensor measure the distance of the object and return a value (e.g. cm).

 