Infrared (IR) proximity sensor

IR is a light with wavelength that is not visible to human eyes, but cameras can see it.

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 measures the distance of the object and returns a value (e.g. cm).