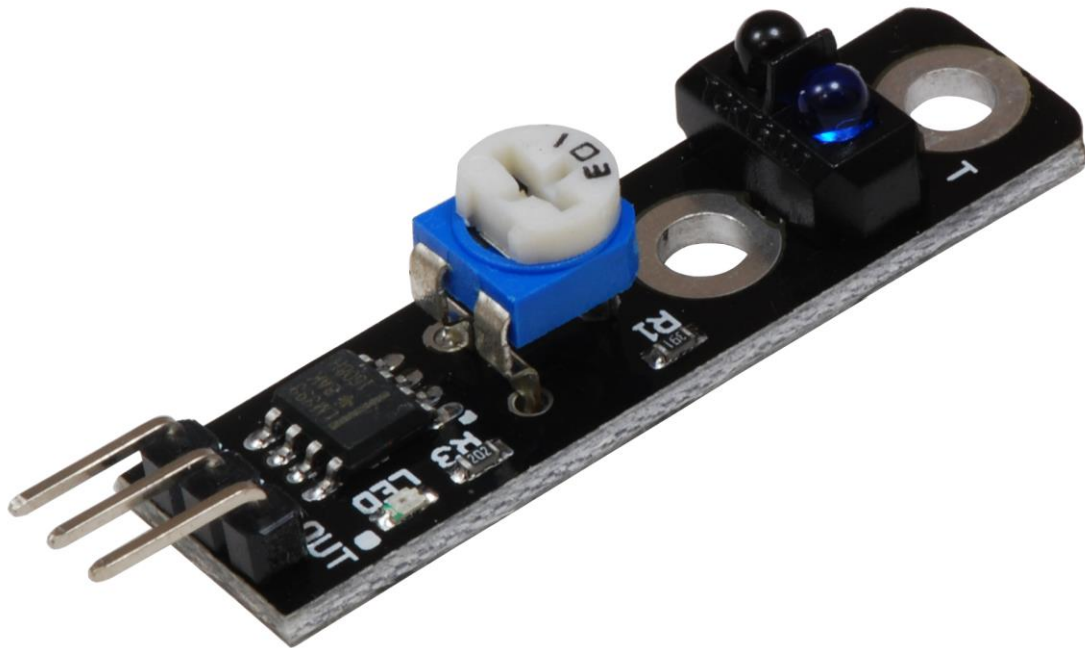


BLACK OR WHITE LINE TRACKING SENSOR - HR0005



The line tracking sensor tracks black lines against a white background or white lines against a black background. This sensor is also known as a hunt sensor or line following sensor. The module has a built-in receiver and transmitter that senses the IR energy and looks for the reflected IR energy to detect the obstacle in front of the sensor. The sensor returns the status of the IR light reflected from the surface. The transmitter is constantly transmitting infrared pulses and the receiver receives these pulses when reflected. When this line tracking sensor is on a black surface, all of the radiation that is transmitted gets absorbed by the surface and nothing is reflected onto the sensor. In this case the output is zero. When operating on a white surface the opposite happens. All of the radiation that is transmitted is reflected and detected by the receiver. In this case the output signal is high or a digital one. A pre-set is used to adjust the sensitivity of the line tracking sensor.

Specifications	
Model	KY-033
Function	Line tracking sensor
Operating Voltage	3.3V - 12VDC
Supply Current @ 5Vdc	18mA to 20mA
Size	39 x 12mm
Output	
Object Detected	LOW
No Object Detected	HIGH
Output Signal Level	TTL
Detection Distance	2 to 40 mm
Effective Angle	35°