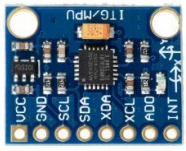
Technical report

Components:

Board	Arduino UNO board	
Sensors	BMP280 sensor	
	MPU6050 sensor	
	Proximity sensor	
Others	Buzzers	
	LED 10mm	
	Jumpers	
Power	li-ion battery	
	Holder	
	V.R 7805	

Arduino UNO board: Manage all other components of the system by digital, analog pins and power circuit.

BMP280: Pressure sensor give the pressure readings in S.I unit (Pascal) in analog value.

MPU6050: Gyroscope sensor gives the change of the angels in every plane (x,y,z).

Proximity sensor: Metal inductive proximity sensor can detect every metal in range of 0.5 cm.

Buzzer: controlled noise maker can make sounds in constant frequency as a warning

LED: 10mm led can make signal in light and take a big voltage without resistance

Jumpers: connect the parts of system

Li-ion battery: 3.7 volts lithium ions battery with 6800mah capacity

Holder: holder connect three batteries in series

V.R 7805: linear voltage regulator converts any voltage under 12 volts to constant 5 volts

Function:

Arduino UNO Board is connected to the *three sensors* by *jumpers* and give values of Pressure, angular velocity and detected metal objects.

If any sensor gives readings pass the threshold the *buzzer* and *LED* will give a warning.

Batteries in *holder* connected to *V.R 7805* and give 5 volts regular to the Arduino.