

STUDY OF PROXIMITY SENSOR
OMEGA TYPE ETB-274

OMEGA TYPE ETB-274 Experimental Training Board has been designed specifically for the study of promixity sensors & transducers which provide the basic knowledge of sensing or detecting metallic and non metallic signal conditioning of the signals received from the sensors and transducers. Practical experience on this board carries great educative value for Science and Engineering Students.

OBJECT:-

- 01 To Study the Inductive Proximity Sensor as a Metal Detector.
- O2 To Study the Capacitive Proximity Sensor as an Object Detector.
- 03 To Study the Optical Sensor as an object Detector.
- 04 To Study Hall Effect Sensor as a Magnetic Pole Detector.

FEATURES

The board consists of the following built-in parts:

01 On Board Inductive Proximity Sensor.

Operating input voltage : 12V DC Sensor type : PNP

Output voltage : 12V DC

Sensing range : 0-10 mm

Switch type : NO : Cubical

02 On Board Capacitive Proximity Sensor.

Operating input voltage: 12V DC

Sensor type : PNP Output voltage : 12V DC

Sensing range : 0-10 mm

Switch type A S : NO

Body : Cubical

03 On Board Optical Sensor

Transmitter : IR LED Wavelength : 940nm

IR Receiver : Photo transistor

Wavelength : 940nm
Operating input voltage : 5V DC
Output signal : TTL
Sensing range : 0-10 mm

04 On Board Hall Effect Sensor (Magnetic Sensor).

Operating input voltage : 5V DC



Output voltage : 5V DC Sensing range : 0-20mm

- 05 Outpur section BUZZER & LED Indicator for the object detection.
- 06 5 & +12V D.C. at 100 mA, IC Regulated Power Supply internally connected.
- 07 Mains ON / OFF Switch, fuse and Neon Indicators are provided.
- 08 The unit is operative on 230V ±10% at 50Hz A.C. Mains.
- O9 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections & observation of waveforms.
- 10 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

11 Weight : 2.100 Kg. Approx

12 Dimension : W 340 x H 125 x D 210

LIST OF ACCESSORIES:

OTHER APPARATUS REQUIRED

01 Cathode Ray Oscilloscope 20MHz OMEGA TYPE CRO-20

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

OMEGA ELECTRONICS

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