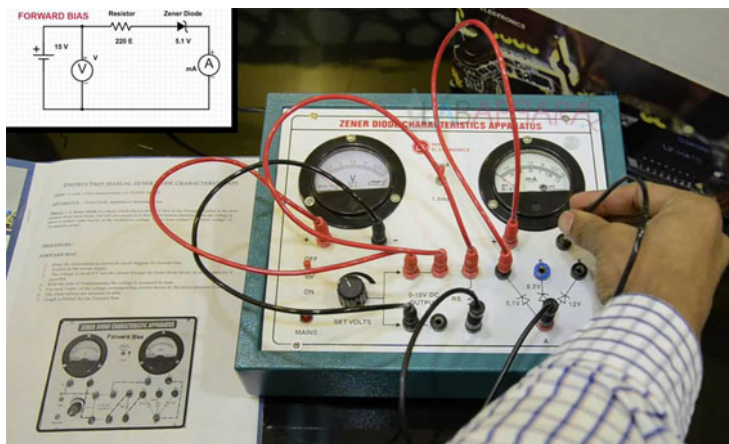


## Quadrature Amplitude (QAM) Modulation & Demodulation



**Product Categories:** [Basic Communication Lab](#), [Engineering Equipment](#)

**Product Page:**

<https://www.labappara.com/product/quadrature-amplitude-qam-modulation-demodulation/>

### Product Description

Quadrature Amplitude (QAM) Modulation & Demodulation

#### **Technical Specifications:**

Carrier Sine Wave Generator:

Four carrier sine waves Generated onboard.

Provides synchronized Sine waveform output of 500 KHz (0 deg.), 500 KHz (90 deg.), 500 KHz (180 deg.), 500 KHz (270 deg.)

Clock And Data Generator:

24 bit variable NRZ-L pattern generated depending on the position of the three nos. of 8- Bit Data Switch provided

Clock Frequency is of 250 KHz

Data Format (Coding):

Non Return to Zero-Level (NRZ-L).

Tribit encoded data (I ,Q & C).

Differential Encoded I & Q Bits

Carrier Modulation Techniques:

Quadrature Amplitude Modulation.

Differentially Quadrature Amplitude Modulation

Carrier Demodulation Techniques:

Quadrature Amplitude Demodulation.

Differentially Quadrature Amplitude Demodulation

On-board Features:

On board Three Nos. of 8 bit variable NRZ-L pattern Data Simulator

Switch Faults are provided on board to study different effects on circuit

QAM/DQAM Demodulation using PLL and Envelop detectors

Switch Faults are provided on board to study different effects on circuit

Interconnections : 4 mm sockets

Test Points: 32 Approx

Power: 230V 10% 50 Hz, 1 AC

Accessories:

Detailed Instruction Manual.

Set of Patch cords