



**Order Code-40624** is an Advance Digital Communication Trainer System that helps one under stand various Digital Modulation and Demodulation Techniques. Various functional block diagrams are provided on-board as an aid for Teaching/Training. These Kits are provided with various Test Points to visualize the signals on Oscilloscopes.

# **FEATURES:**

- Receiver Clock generated by PLL method.
- Demodulation is done using PLL and Envelop Detector Method.
- Switch faults are provided to study its effects on circuits.
- Block Description screen printed on PCB.
- In-Built Power Supply.

## LIST OF EXPERIMENTS:

- To study Tribit decoding technique.
- To study Differential decoding of Data.
- Observation of constellation diagram.
- To study bandwidth efficiency of 8-QAM/DAQM.
- To study 8-QAM Demodulation technique.
- To study DQAM Demodulation technique.
- To study Effect of Switch faults.

## **SPECIFICATIONS:**

## Receiver Clock

- Receiver clock generated using PLL method

# Data Format (Decoding)

- Non Return to Zero-Level (NRZ-L)
- Tribit Decoded data (I,Q&C)
- Differential Decoded I & Q Bits.

## Carrier Demodulation Techniques

- Quadrature Amplitude Demodulation
- Differentially Quadrature Amplitude Demodulation

#### On-board features

- QAM/DQAM Demodulation using PLL and Envelop detectors
- Switch Faults are provided on board to study different effects on circuit
- Block Description Screen printed on glassy epoxy PCB

#### Interconnections

- All interconnections are made using 2mm banana Patch cords.
- Test points are provided to analyze signals at various points.
- All ICS are mounted on IC Sockets.
- Bare board Tested Glass Epoxy SMOBC PCB is used.
- In-Built Power Supply of +5V/1.5A, ±12V/250mA with Power ON indication
- Attractive enclosure.
- Set of 2mm Patch cords for interconnections.
- User's Manual with sample experiments programs.

Note: Specifications are subject to change.

305, Taru Chhaya Nagar, Tonk Road, Jaipur-302029, India Tel: +91-141-2724326, Mob: +91-9413330765 Email: info@tesca.in, tesca.technologies@gmail.com Website: www.tesca.in