



**Order Code-40619** 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:**

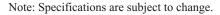
- Onboard synchronized 500 KHz Sine-wave generator.
- Differential Encoding type Data Format.
- On-board crystal controlled Pulse Generator.
- On board 8 bit Data Simulator.
- Block Description screen printed on PCB.
- In-Built Power Supply

## LIST OF EXPERIMENTS:

- Principles of advance digital modulation techniques.
- Differential Encoding of Data.
- Binary Phase Shift Keying Modulation / Demodulation technique.
- Differential Phase Shift Keying Modulation / Demodulation technique.
- Differentially Encoded Phase Shift Keying Modulation / Demodulation technique.
- Effect of Switch Faults.

## **SPECIFICATIONS:**

- Carrier Sine Wave Generator
  - Provides synchronized Sine waveform output of 500KHz(0 deg.), 500KHz(180 deg.)
- Clock And Data Generator
  - 8 bit variable NRZ-L pattern generated depending on the position of the 8-dit Data Switch provided.
  - Clock Frequency is of 250 Khz.
- Data Format (Coding)
  - Non Return to Zero-Level (NRZ-L)
  - Differential Encoded NRZ-L.
- Carrier Modulation Techniques
  - BPSK modulation
  - DPSK modulation
  - DEPSK modulation
- On-board features
  - Square Looping Technique used in Demodulation section
  - 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.



## Tesca Technologies Pvt. Ltd.

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

