

MEASUREMENT OF BANDWIDTH EFFICIENCY OF QPSK

MODEL - COM117E

This trainer has been designed with a view to provide practical/experimental knowledge of Measurement of Bandwidth efficiency of QPSK.



SPECIFICATIONS

1. Power supply requirement : 230V AC, 50 Hz.

2. On Board Modulating Digital Data signal generator to generate any binary input word with Bit clock & Word

Clock.

Word Length : 8 Bits.
Word Clock Frequency : 10 KHz

Data Format : NRZ, Even Bits I and Odd bits Q signals.

3. On Board synchronized RF Carrier: 1.28 MHz - Sine & Cosine.

4. Modulator Type : Using two Balanced Modulators with two PSK and adder

5. Demodulator Type : Balanced Modulator detectors.

6. Decision Threshold : Comparator

7. All parts are soldered on hollow tags of 0.1" diameter with height of 0.4" on the front side of single PCB of size 18"x12" with complete circuit diagram screen printed in multicolor on front side with parts at the same place. The acrylic cover is fitted on PCB to safeguard parts on front side in elegant wooden box having lock and key. The testing points are provided with 1.25" tags to connect CRO probe. True measured colored waveforms are

given on panel.

8. Standard Accessories : 1. A Training Manual.

2. Connecting Patch cords.

EXPERIMENTS

- 1. To study theory of QPSK Modulation & Demodulation.
- 2. To generate QPSK signal.
- 3. To demodulate QPSK signal using balanced modulators.
- 4. To observe QPSK Phasor diagrams on CRO for different binary inputs.
- 5. To Calculate QPSK Bend width Efficiency.

In keeping view of SIGMA policy of continuous development and improvement, the Specifications may be changed without prior notice or obligation.

Sigma Trainers and Kits

E-113, Jai Ambe Nagar, Near Udgam School,

Thaltej,

AHMEDABAD - 380054.

INDIA.

Phone(O): +91-79-26852427/ 26850829

Phone(F): +91-79-26767512/ 26767648

Fax : +91-79-26840290/ 26840290

Mobile : +91-9824001168

Email: sales@sigmatrainers.com

: sigmatrainers@sify.com

Web: www.sigmatrainers.com

Dealer:-