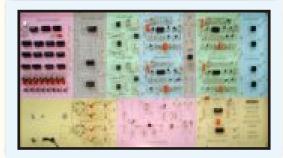


## MEASUREMENT OF BANDWIDTH EFFICIENCY OF QAM

## MODEL - QAM100N

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



SPECIFICATIONS

1. Power supply requirement

230V AC, 50 Hz.

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

:

	WORDLENGT	•	o 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 Section	:	Serial to Parallel Converter	
			Two to Four level PAM converter	
			Using two Balanced Modulators with two PSK and adder	
5.	Demodulator Type	:	Balanced Modulator detectors.	
			Four to Two level converter	
			Parallel to Serial Converter	
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 QAM Modulation & Demodulation.
- 2. To generate QAM signal and demodulate it
- 3. To observe QAM modulated output by for different input binary codes.

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