

OMEGA TYPE ETB-259 are compact and user friendly learning Technical Specifications platforms to provide a modern, portable, comprehensive and practical way to learn Technology. Each ETB-259 is provided with detailed material which covers basic theory, step by step procedure to conduct the experiment and other useful information PAM-PPM-PWM are the basic Pulse Modulation Techniques. ETB-259 provides complete set up to the students for performing experiments on these techniques. They can study Sampling, Pulse Modulation, and Demodulation & Signal reconstruction process. Separate circuits are provided for each technique. The learning material provides exhaustive technology details and experimental assistance.

FEATURES:

- 01 PAM-PPM-PWM Modulation & Demodulation techniques, using Natural & Flat-top sampling
- 02 Analog Sample, Sample & Hold and Flat-top outputs
- 03 Selectable 4 different sampling pulse frequencies on board
- 04 Voice communication using dynamic microphone & speaker
- 05 On-board filter and AC amplifier
- 06 8 Switched faults
- 07 Functional Blocks Indicated on board mimies.
- 08 Input-Output and test points provided on board.
- 09 Built in DC Power Supply.

OBJECTS:

- 01 Study of PAM Using Natural & Flat Top Sampling.
- 02 Study of PAM Using sample & Hold Circuit.
- 03 Study of PAM and Demodulation with sample, sample & Hold & Flat Top.
- 04 Study of PPM Using DC Input.
- 05 Study of PPM Using Sine Wave Input.
- 06 Study of PPM Demodulation
- 07 Study of PWM Using different sampling Frequency.
- 08 Study of Pulse width Demodulation.
- 09 Study of Voice Link Using PAM.
- 10 Study of Voice Link Using PPM.
- 11 Study of Voice Communication using PWM.



TECHNICAL SPECIFICATIONS:

Pulse Modulation Techniques:

- 01 Pulse Amplitude Modulation.
- 02 Pulse Width Modulation.
- 03 Pulse Position Modulation.
- 04 On-board Sampling Frequencies
(Pulse output) : 8KHz, 16KHz, 32KHz, 64KHz.
- 05 Function Generator:
Sine wave : 2 KHz (Gain adjustable).
Square wave : 1KHz
- 06 Low Pass Filter : 2 order BW filter
- 07 Audio Input : Voice link using dynamic mic & speaker
- 08 AC Amplifier : With adjustable Gain Control
- DC Output : 0 - 4 V (variable)
- 09 Switched Faults : 8 Nos
- 10 Test Points : 23 Nos
- Interconnections : 2mm banana sockets.
- Learning material : Theory, procedure, reference results, etc.
- Operating Condition : 0-40 C, 85% RH
- Power Consumption : 3 VA (approximately)
- Mains Supply : 230V \pm 10%, 50/60Hz
- 11 Weight : 3.00 Kg. approx.
- 12 Dimensions (mm): W 340 x D 210 x H 125

LIST OF ACCESSORIES:

- 01 Patch cord 2mm length 50cm Red 03
- 02 Patch cord 2mm length 50cm Black... 02
- 03 Head Phone..... 01
- 04 MIC Phone..... 01

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

OMEGA ELECTRONICS