



Scientech 2727 is a compact and user friendly learning platform which is very useful for students to understand the concept of PWM generation technique, and Boost Converter topology on various load configurations. It is also helpful for understanding the converter output on various filter configurations. Platform explains PWM generation technique, Boost converter operation, and power isolation circuit.

Features

- Easy to operate & understand
- Optically isolated PWM generation with Gate driver
- Inbuilt isolation section for measurement of the signal
- Space provided for external inductor connection
- Test Points provided at output of each section to measure the signals

Scope of Learning

- To study PWM generation
- To study Boost Converter with different filter components and loads

Technical Specifications

Input DC Voltage	: 24V/1A
PWM Frequency Variation	: 1KHz to 22 KHz
Duty Cycle Variation	: 10 % to 45%
Load Assembly	: RL1 & RL2 (75Ω & 75Ω)
Power Isolation Section	: Single channel
Power device	: IGBT TQSHIBA 20JT101
MOSFET/IGBT Driver	: MC33153
Inductors	: L1 (1.5mH), L2 (404uH), L3 (optional)
Capacitors	: C1 (1000μF/63V) C2 (470μF/63V) C3 (220μF/63V)
Test Points	: 15 nos.
Banana Socket insert 2mm:	39 nos.
Product Tutorial	: Online on www.ScientechLearning.com
Dimensions (mm)	: W 326 x D 252 x H 52
Power Supply	: 110V - 260V AC, 50/60Hz
Weight	: 1.5Kg (approximately)
Operating Conditions	: 0-40°C, 85% RH
Included Accessories	: 2mm Patch Cord Red 16", 8"-2nos. 2mm Patch Cord Black 16" -1no. 2mm Patch Cord Black 8"-2nos. 2mm Patch Cord Blue 8"-3nos. BNC to BNC Cable-1no. BNC to Test Probe-1no. Mains Cord 1no.