



Sciencetech 2729 is a compact and user friendly learning platform which is very useful for students to understand the concept of PWM generation technique, and Buck-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, Buck-Boost Converter operation, and power isolation circuit to measure the isolated output.

Features

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

Scope of Learning

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

Technical Specifications

Input DC Voltage	: 24V/1A
PWM Frequency Variation:	: 1 KHz to 20 KHz
Duty Cycle Variation	: 20% to 60%
Load Assembly	: RL1 & RL2 (75Ω & 75Ω)
Power Isolation Section	: Single channel
Power device	: MOSFET IRF450
MOSFET/IGBT Driver	: IR2117
Inductors	: L1 (5.7 μH); L2 (3.8 μH); L3 (1.5mH); L4 (354μH)
Capacitors	: C1 (1000μF/63V); C2 (470μF/63V) C3 (1000μF/63V); C4 (470 μF/63V)
Test Points	: 23 nos.
Banana Socket	: 39 nos.
Product Tutorial	: Online on www.SciencetechLearnnig.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 16"-3 nos. 2mm Patch Cord 8"-9 nos. BNC to Test Probe-1 no. BNC to BNC Cable-1 no. Mains Cord.-1 no.