



Engine Combustion Analysis Kit (Product Code: R&DU05)

Features

The Engine Combustion Analyzer kit is a reliable tool to examine the combustion process of an internal combustion engine. This rugged, compact instrument provides the user with an efficient and effective method to evaluate and determine power cylinder combustion characteristics, and peak pressure balance. The engine combustion analyzer kit includes Software, combustion pressure sensor, and Crank Angle Encoder.

Application

- Demonstration of IC engine combustion process.
- Extremely use full for research work on combustion analysis.
- Useful for studies relating to alternative fuels.
- Engine tuning.

Data Acquisition card

Analog Input	
Differential Channels	12
Resolution	12 bits
Sample Rate	200 Ks/s
Max Voltage	5 V
Number of Ranges	4
Simultaneous Sampling	Yes
On-Board Memory	5120 samples
Analog Output	
Channels	2
Digital I/O	
Input-Only Channels	30
Output-Only Channels	12
Timing	Software
Logic Levels	TTL
Maximum Input Range	0 V - 5V
Maximum Output Range	0 V - 3.3 V
Counter/Timers	
Counters	2
Max Source Frequency	84 MHz
Resolution	12 bits
Logic Levels	TTL
Total DC output Current on all I/O lines	130mA

Product Description

For ready use on diesel engines in educational institutions, the system comes with a diesel engine head with machined provision for mounting the combustion pressure sensor. The system can be quickly assembled at the side even by any diesel mechanic. All instrumentation wiring is plug and play type, power full runtime software to calculate around 20 combustion related parameters with PV, P-teat, heat release rate and mass Fraction burnt curves presented in colorful screens.

Product / Component Specification

Combustion pressure sensor	Piezo-electric 0-100 bar
Crank angle encoder	360 ppr, 1 Deg resolution with TDC pulse
Daq	200 Ks/s
Software	Engine test express for engine combustion analysis and performance software



Software (Engine Test Express)

Windows based powerful software for real time data measurement, auto zoom graphs, analog and digital display of data in the computer, store indefinite no of graphs for analysis. Facilities to export data to Microsoft excel. The data acquisition software is developed by legion brothers.

