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**Product Name :**  
Biodiesel Process Trainer PLC Control

**Product Code :**  
LBNY-0005-12400018



[www.laboratoryinstrumentindia.com](http://www.laboratoryinstrumentindia.com)

#### **Description :**

Biodiesel Process Trainer PLC Controls provides students the opportunity to gain real operating experience focusing on all aspects of biodiesel production the chemical process, control strategy, and management of the chemical process. The Biodiesel Process Trainer is a pilot-scale plant that demonstrates both batch and semi-continuous conversion of vegetable oil feedstock into biodiesel. The Biodiesel Process Trainer has instrumentation to provide for control of all process flows, temperatures and levels.

#### **Function:**

The rate of reaction is influenced by several factors including temperature and degree of mixing. The Biodiesel Process Trainer is designed and built for instructional use and includes many student-friendly features. The conversion of triglycerides into biodiesel is normally performed by base-catalyzed conversion. This reaction takes place at modest conditions of temperature and pressure and can produce conversion rates over 98%. This highly flexible process trainer incorporates various commercially available mixing technologies and process configuration options to allow for the comparative analysis of the technologies currently available in the biodiesel industry. The main reaction vessel is constructed from industrial glass allowing the students to visually monitor the trans-esterification process.

#### **Technical Specification :**

Integral electric process heaters with PLC control  
Electronic process measurement and PLC control  
7- 10 Litres per hour oil processing capacity  
Additional safety features include: combustible gas detector with power interlock and several pneumatic powered process pumps and controls

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Glass reactor vessel 6(150 mm) Diameter

Integral storage and mixing vessels are translucent for visual monitoring of the chemical processes

Complete skid-mounted unit with integral support structure

Approximate overall dimensions 762 x 3620 x 2460 mm high (30 x 143 x 97 high).



**Laboratory Instrument India**