



FDE-100S training set simulates a functional fire detection and extinguishing system. It incorporates the continuous loop and spot detectors with controls, indication and test circuits.

The extinguisher discharges shop air when the system is activated. The instructor can induce faults for the trainees to troubleshoot, providing hands-on experience in troubleshooting.

The trainer is installed on a movable frame, it can be positioned as needed. This set simulates the system with two fire extinguisher container.

## Specifications

### Features

- Understanding fundamentals of aircraft Fire Detection & Extinguishing system and its components.
- Fire is simulated on the training set with any sensor.
- The trainer is designed with three zones allowing Engine-1 and Engine-2 fire simulation.
- Engine-1 fire warning is activated from fenwal detector.
- Engine-2 fire warning is activated from IR sensor.
- APU fire warning should be activated from loop detector.
- Trainer includes separate extinguishers for each zone on the training set.
- The trainer includes an original, emptied, secure aircraft extinguisher bottle for maintenance practices.
- Trainer set includes cargo smoke system.
- The sensor generates necessary warnings when smoke is introduced.
- The trainer has discharge nozzles for each zone.
- Discharge nozzles are between 150 - 350 mm in length.
- Trainer includes three aluminum protection plates for heating sections on the loop sensor.
- Loop sensor is minimum 900 mm in length.
- The complete loop sensor is mounted on the training set so that it could be clearly seen.
- Trainer includes master caution system that could be reset.
- Trainer includes warning-horn system.
- Trainer includes three easily fillable fire extinguisher bottles for extinguishing simulation.
- Pressure indicators are for each bottle.
- Each bottle has filling points.

- Trainer has three full/empty mechanic indicator for bottles.
- Trainer has control selenoids for each zone line.
- Extinguishing system work crossfeed mode.
- Aircraft fire scenarios are simulated.
- Wirings on the trainer are connected via terminals.
- Wires should have clear identification labels for each wire.
- All wires should be coded and labeled for troubleshooting.
- Instructor's panel for Fault Insertion
- The system mounted on a metal/aluminum mobile stand.
- Metal/aluminum frame with 4 wheels. 2 of 4 wheels are lockable.
- Training video for teachers
- Delivered fully assembled tested and ready to operate
- Colored Ultraviolet printing method on aluminum composite panel

## Components

- Control Panel
  - Master power switch
  - Master power lamp
  - Press to test illuminated Master caution
  - Aural warning horn
  - Guarded Engine-1 fire status lamp and button
  - Guarded Engine-2 fire status lamp and button
  - Guarded APU fire status lamp and button
  - Cargo Smoke detection
  - System Test Switch
- Fire control unit
- Continuous-Loop temperature sensor
- Loop sensor control box
- Fenwall spot detector
- Fenwall spot detector control box
- IR(infrared) dedector
- IR sensor control box
- Smoke dedector
- 1 unit simulated fire- Extinguisher bottle
- 1 unit Extinguisher bottle pressure gauge
- 1 unit Extinguisher bottle line control valve
- 1 unit Resetable Discharge Indicator

- 1 unit at least 300mm discharge nozzle
- 1 unit aircraft Extinguisher bottle for maintenance applications
- 1 unit terminal
- Fault panel

## Documentation

- User's Manual
- Study Guide
- Instructor's Guide
- Components Diagrams

## Power Specs

- Electrical box
- Residual current device
- Emergency Button
- Energy Signal Lamp
- 110 VAC 60 Hz or 220-240 VAC 50 Hz