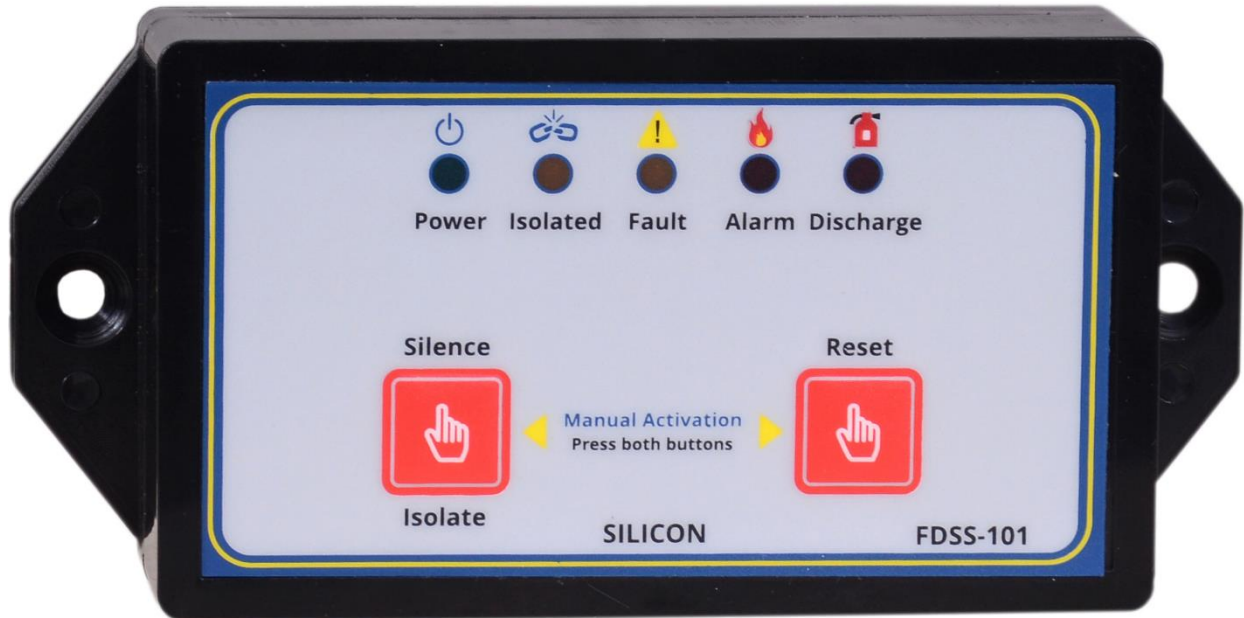


# SILICON FDAS (AIS-135)

## FIRE DETECTION AND ALARM SYSTEM (FDSS-101)



**Safety first!** Silicon's Fire Detection and Alarm System (FDSS-101) is an intelligent system that monitors the Vehicle's Engine Compartment continuously and saves the human life in case of any fire breaks out in the engine compartment. Silicon's Fire Detection and Alarm System gets activated by linear heat detector sensor when the temperature in the engine compartment reaches to the trigger temperature of the linear heat detector sensor.

System consists of Control Panel (CP) with status indicators for indicating the status of Fire Detection and Alarm System, Linear Heat Detector sensor for sensing the fire condition in the Engine compartment and Audio Visual Alarm to indicate the fire conditions of vehicle and also the healthiness of the system.

System monitors the health status of the Fire Detection and Alarm system by diagnosing all the accessories connected to the Control Panel. Health status of the Control Panel is detected and indicated to the driver by audio visual method in case of any malfunction in the system, so that it can be rectified.

System is connected to Vehicle's Main Battery so that the monitoring happens even when the Vehicle is completely switched off. The energy efficient design of the Silicon's Fire Detection and Alarm system draws very less current to ensure that the battery is not drained out when the vehicle is not operated for quite some time.

Linear Heat Detection Sensor is used in the system for sensing the Fire in the engine compartment.

Continuity of all the wirings in the system except main power is checked by the Control panel for Open conditions and alarm is triggered to ensure the user attends to the fault in the system. This ensures the healthiness of the entire Fire Detection and Alarm System and vehicle safety

The control panel has the in-built system to operate the Fire Extinguishers so that the entire system can be easily converted into Fire Detection and Suppression System (FDSS).

The system is state of art and compliance to AIS-135 and it is certified by Indian Certification body.

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## Technical Specifications

<b>Dimensions</b>	<b>Control Panel 155(L) x 70(W) x 38 (H) mm.</b> High Reliable Plastic Housing
<b>Operating Voltage Range</b>	10V to 30V DC (Wide rage. Same system for 12V and 24V Vehicles. Less Inventory to vehicle maker)
<b>Operating Temperature Range</b>	-30°C to +85°C
<b>Standby Current</b>	(Approx.) 35mA @12V, 40mA @24V
<b>Control Panel CPU</b>	Advanced 32-bit Microcomputer
<b>Fire Detection Zones</b>	1 (Engine Compartment)
<b>Status Indicators</b>	Power, Isolated, Fault, Alarm & Discharge
<b>Reverse Battery Protection</b>	Yes
<b>Transient/Over Voltage Protection</b>	Yes
<b>Over Current Protection</b>	Yes. Internal electronic fuse, external regular fuse in Wiring
<b>Fire Sensor</b>	Linear Heat Detection Sensor (LHD). USA make
<b>Alarm Visual Indication</b>	Yes. Dual (one in Control Panel. One external)
<b>Alarm Audible Indication</b>	Yes. Dual (one in Control Panel. One external)
<b>Alarm Sound Level</b>	100+/-5 dB at 24VDC (External Alarm)
<b>Self-Diagnostics</b>	Yes. Self-test during Power On and also when long pressing Reset Key. All internal parts are checked.
<b>Automatic Alarm activation</b>	Yes.
<b>Manual Alarm Activation</b>	Yes. Pressing both keys triggers manual activation of Alarm / Discharge (if applicable)
<b>Isolation Mode</b>	Yes. Useful when the vehicle is in maintenance at Workshops
<b>Fault/Self-Monitoring</b>	Yes. Intelligent Control Panel (CP) Continuously monitors the health status of all parts (Sensor, Alarm, CP's Internal Circuitry)
<b>Compliance</b>	AIS-135 : 2016
<b>FDSS Upgrade option</b>	Yes. Control Panel is Common for FDAS and FDSS (Certification to be verified)
<b>Installation Plug &amp; Play</b>	Yes. System comes in kit form with all necessary parts including fasteners

*\* Specifications Subject to Change without Notice*

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## Connection Diagram

