# RDL Biometric Solution

## Overview

Accountability and Security plays a pivotal role in managing business. RDL introduces Biometric add on block product designed to seamlessly integrate with the shop floor machineries. Flexible and customizable design allows to control various operations like switching machine job operation, down time escalation and product loss escalation. The product is tested with all major PLC vendors and supports multiple interface options.

## Features & Specifications

**Controller**: STM32/ATmel

**Memory**: Flash 256KB, SD CARD 32GB

**RTC**: Built-in RTC for stamped data logging

**Communication**: RS485 MODBUS, Rs232, USB & Ethernet 10/100Mbps

**Fingerprint Sensor:**
- Fingerprint image input time: <0.3 seconds
- Window area: 14x18 mm
- Matching method: Comparison method (1: 1)
- Search method (1: N)
- Characteristic file: 256 bytes
- Template file: 512 bytes
- Storage capacity: 1000 pieces
- Security Level: Five (from low to high: 1,2,3,4,5)
- Fake rate (FAR): <0.001%
- Refusal rate (FRR): <1.0%
- Search time: <1.0 seconds (1: 1000 hours, mean value)
- Host interface: UART \ USB1.1
- Communication baud rate (UART): (9600xN) bps Where N = 1 ~ 12 (default N = 6, i.e., 57600bps)
- Working environment: Temperature: -20 ℃ - +40 ℃ Relative humidity: 40% RH-85% RH (no condensation)
- Storage environment: Temperature: -40 ℃ - +85 ℃ Relative humidity: <85% H (no condensation).

**DRY contact**: 1x SPDT Relay

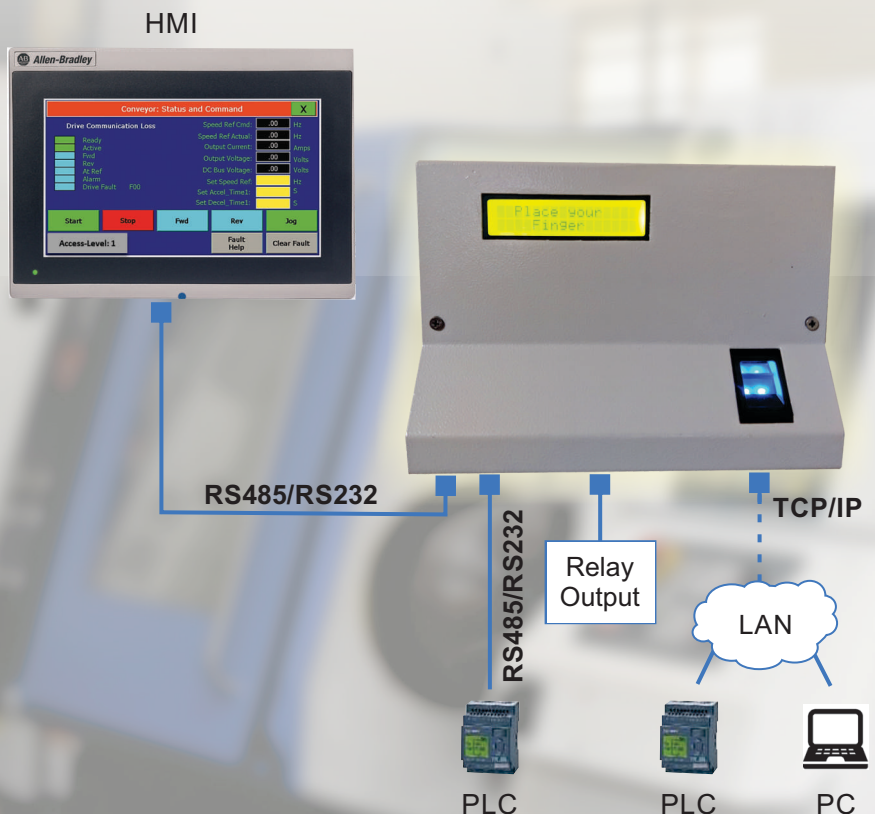**Power supply** : 12 to 36 volts DC Supply

**Enclosure**:
- IP 20
- Mountng: Wall / DIN Rail

## Operational Benefits

Ease the authentication process by installing RDL Biometric add on block as this supports wide range of industrial communication protocol like RS232, RS485 and TCP/UDP Modbus and offer below mentioned operation benefits.

- Improved productivity and asset utilization.
- Reduced down time.
- Paperless production environment.
- Improved security level of access.

## Application Diagram

# Application

## Switching Machine Job Operation

Privileged access to Machining Processes using different Tools and Materials
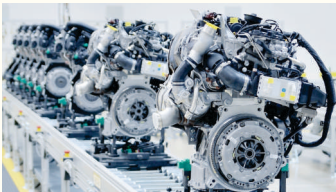
## Mono Stable Biometric Switch

Accountable response to situations like emergency system with valves, shutdown & access control
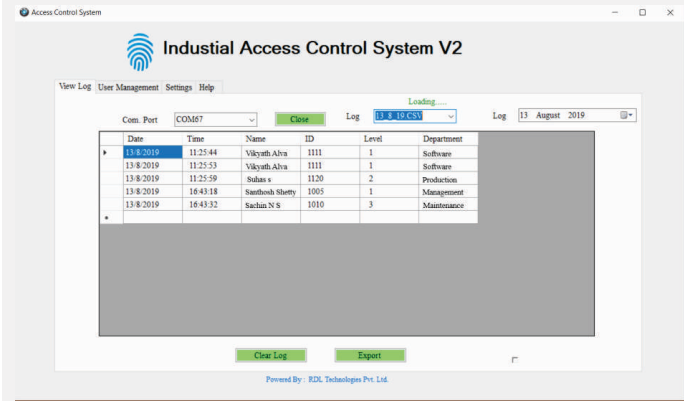
## Down Time Escalation

Track service teams response time towards break downs, reducing down time and improved productivity

## Production Loss Escalation

Accountability of floor managers during production break downs, timely Corrective actions preventing losses

# RDL Biometric Configuration Manager

At no extra cost every RDL Biometric add an block is shipped with plug and play configuration Manager, that enable configuration of all input-output ports across interfaces and also communication parameter. Configuration Manager is designed to be operated with minimal training and technical expertise.

# Mounting Information

## Standard Mount

One Consolidated Enclosure unit, finger print reader and Controller unit. Easy to deploy on walls, machine enclosure, etc

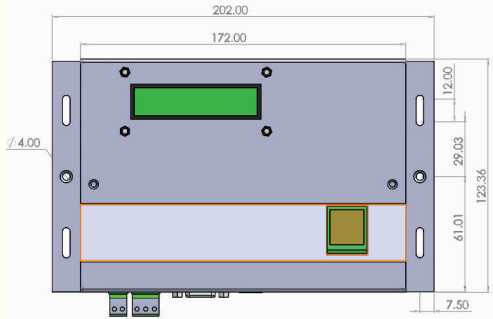**Model No.: RDL810**

## Custom Mount

Suitable for custom mount application( Fig A & Fig B), Separate finger print reader and controller unit provided along with interconnection cable (Max 5 meters).
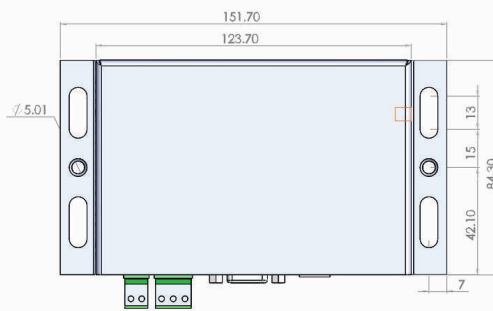
**Custom Panel Mount fig. A**

**HMI fig. B**

**Model No.: RDL810A**

# Dimensions

**Model No.: RDL810**

**Model No.: RDL810A**

# RDL Technologies Pvt. Ltd.