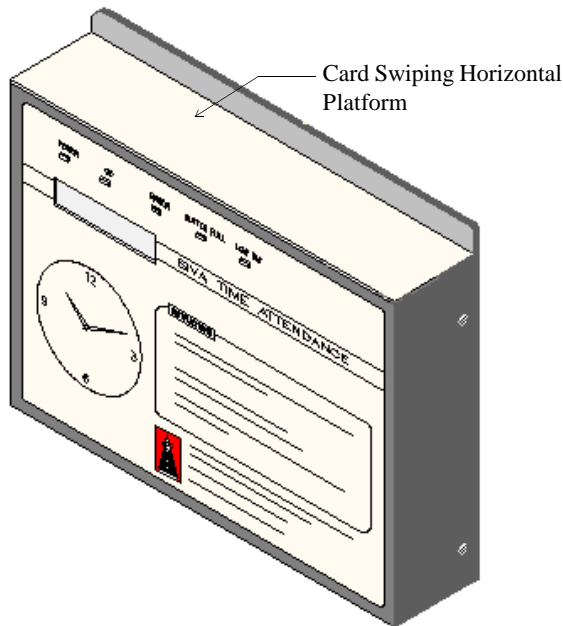
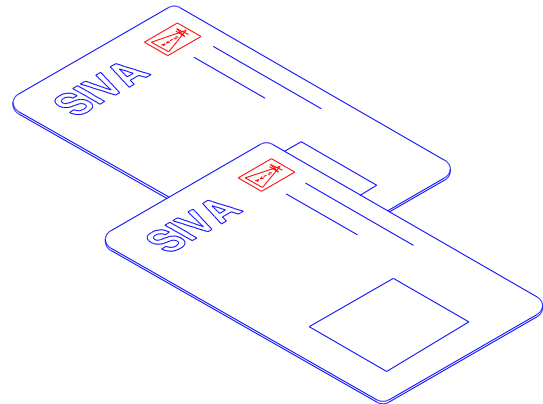


SIVA INTELLIGENT SEMI-PROXIMITY CARD READER (for Access Control & Time Attendance)

Model- STAR-98



**Multi direction Semi-proximity
Technology
INDIGENOUS**



Siva access control & time attendance system consist of an IBM compatible Computer & number of field installed semi-proximity Intelligent Card Readers (ICR) . ICR works on Eddy Current Loss Detection principle in which a gap of 1-2 mm is always maintained between card & the sensor . ICR 's are State of the art 8 bit microcontroller based unit with 32 Kilobyte RAM ,16 Character LCD backlite display , displaying clock & card number. PVC plastic coded & laminated cards are used to generate the entries(movement / timings) . Information encoded in the card is read by the ICR & is stored in its memory. This stored information is captured by PC using Siva data acquisition software & is stored in ASCII , DBF & Binary format. In access control applications the card readers gives a signal to release the Electric Lock or Turnstile gate .

Features :

- Complete access control & time attendance solution.
- 100 % Indigenous & Tamper proof system.
- Multi directional card swiping , from left & right side .
- Standalone & On-line mode (Optional) .
- Inbuilt real time clock with calendar and continuous display of time.
- Reader can be located at a distance of 1.2 Km & more by reducing baud rate (Max 3 Km.)
- One twisted pair shielded cable is required (120Ω characteristic impedance, 80Ω per km. (Max.) DC resistance, 24 SWG copper conductor).
- Inbuilt DC switch mode regulator, with wide range of DC inputs.
- User friendly messages on card reader LCD display .
- Operational battery backup for 8 hours.
- Direct Interface to Payroll software.
- User friendly , menu driven & password protected software.
- Interface with any Door lock / Strike & Turnstile Gates for implementing Access Control System.
- Optional Keypad for PIN entry OR Movement Control .

Semi-Proximity : The Technology advantage.
(From Si vananda El ectroni cs : An ISO 9001 certi fi ed Company)

Semi-proximity Card : Semi-proximity cards are factory encoded with a pattern of metallic foils & laminated . This pattern is decoded by concealed sensors based on the *Eddy Current Loss Detection* (ECLD) principle. Photographs & other personal information is available on the cards to serve as Identity card also. Semi-proximity cards are of standard credit card size & can be displayed using any pouch & clip arrangement. Semi-proximity cards are slide on open horizontal platform of the card reader to record the entries.

Line Driver : Line Driver is an opto isolated unit which connects the Field Installed ICR's located at long distances from the Serial port of PC. The Basic function of the line driver is to convert RS 232 signals into RS 485 signals and vice versa.

Data acquisition & Reports Generation software : Siva data acquisition software gathers information stored in the card readers memory & stores it in the PC's hard disc in DBF , Binary & Text format . It synchronizes the clocks of all card readers & sets all other control parameters. Data collected from the card readers is processed & various reports are generated for the Management and Personnel Departments. The Processed DBF outputs of the Software can be interfaced with any/existing payroll package. Online (optional) data acquisition software is also available for online validation of each card entry.

Reader Configuration : The ICR's can be configured for **Negative Reference Data (NRD)** or **Positive Reference Data (PRD)**. In the NRD mode , the card numbers which are to be restricted are stored in ICR's memory and rest all cards are accepted. In the PRD mode , control parameters of individual cards are stored in memory (Allowed date range , Priority , Shift Code etc) .

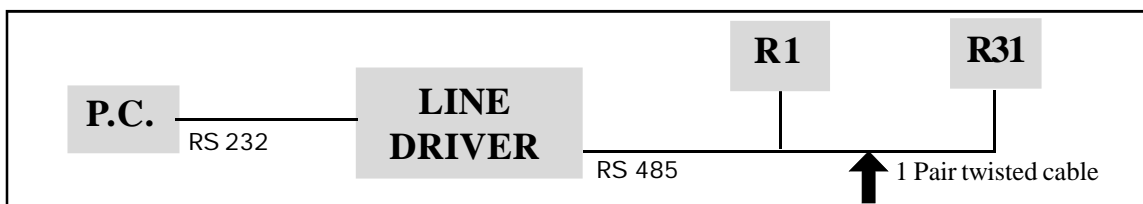
Reports Available : Presentee , absentee , Late Coming , Early going , Long hours , Short hours , Overtime , Single attendance , Intervening movements , Leave Card , regularization , Muster roll , analysis etc. Facility is available to regularize employee's attendance Overtime & Leave sanctioning , Shift planning , declaration of Paid holidays & Leave types.

Applications :

- 1 Physical access control for R & D labs , Network server rooms , Nuclear Facilities , Industry entrance , sensitive zones with Authorised entry and movement control / recording.
- 2 Time and Attendance Recording for Industrial Payrolls, working hours calculation , immediate attendance monitoring and leave managements.

SPECIFICATION :-

Reader sensors	: Open horizontal slide platform (all directions)		
Principal of operation	: Eddy current loss detection (ECLD) principle		
Processor	: 8031 Microcontroller (8 bit)		
Memory	: 32 Kilobytes , Battery backup RAM		
Data storage	: 5000 punches in NRD mode.		
Communication	: RS 485 with Programmable Baud Rate upto 19.2 K on Computer port COM1 or COM2		
Display	: 16 Characters X 1 line Alphanumeric backlit LCD		
LED indication	: Power, Error, Go, Buffer full & low battery		
Power supply	: 230V AC, 50Hz ± 20% or 20 V DC (80 mA)		
Operating Temperature	: 5° to 50° C	Humidity	: RH 95%
Mounting	: Wall and Turnstile mounting	Weight	: 3.2 kg
Dimensions	: L=245mm x B=54mm x H=180mm		



Note : For Access Control applications - Full Height Turnstiles , Tripod and Electric Door Strike are also available. We also undertake turnkey projects as per site requirements.



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