

<b>4. Finger Enrollment reader with Enrollment &amp; Terminal Management Software with Smart Card Writer</b>		
<b>Sl. No</b>	<b>Item Description</b>	<b>Item Specification</b>
1	Biometric type	Finger print
2	Sensor Type	Optical (Minimum 500 dpi)
3	Enrollment size	Maximum 512 bytes for native format and 512 Bytes for ISO 19794 format for each finger template.
4	Operation mode	Shall support (Finger + Smart card), (Finger + Smart card + PIN), (Finger + PIN), (Smart Card + PIN), Finger only, Smart Card only for single / multiple user/s.
5	Storage capacity	Minimum 10,000 finger print template storage capacity
6	Transaction capacity	Minimum 50,000 events
7	Verification time	Less than one second for 1:1 biometric verification
8	Smart card reading capability	Mifare 13.56 MHz with sector reading (32 bit format in accordance with ISO 14443 series with dual key authentication (Both Key A and B of Mifare architecture)
9	Sensor sensing conditions	Should be capable for reading finger in dry, wet, mehendi and oily conditions
10	Smart card read range	5 cm minimum and to accommodate +/- 30 deg elevation error during presentation by the user
11	Interfaces	Ethernet, Weigand better than 37 bit format
12	LCD display with backlight	To show day, date & time by default. To display the details of valid / invalid entry with Name and Employee's ID at the time (24 Hrs. Format) of card flashing.16 Character or better display is preferable.
13	LED indication	To show power on, valid entry, invalid entry or any error
14	Audible alarm	For valid entry, invalid entry and any error. Alarm shall be audible in outdoor conditions
15	Real Time Clock (RTC)	RTC with battery backup. Reader RTC time shall be synchronized through NTP time server. Provision should be available to set the NTP server parameters. Time sync. Interval shall be customizable.
16	Data & time retention	In case of power failure, the data retention to be provided using flash memory and the Real Time Clock of the unit should be retained with current date and time

17	Protection of transaction data	In case memory is full; the reader shall disable further transactions to protect overwriting of transactions data. Message shall be displayed on reader and admin alert shall be sent to administrator
18	Event/ Alarm logger	Event logging in the onboard memory for the alarm observed at each location along with time shall be archived and retrieved
19	Safety certification	The device shall be UL/CE certified (Bidder to attach documentary evidence).
20	Operating conditions	Shall be weather proof (Polycarbonate enclosure) and capable for operation in outdoor condition under canopy without interference from day light illumination considering all the seasons. (preferably IP rated)
21	Power save	Provision to go to power save mode if not in operation for more than 30 seconds
22	Environmental	Shall operate at 0o to 50oC and RH of 10% to 90%
23	Battery backup	Rechargeable battery to withstand 12 Hours of operations with indication for available battery capacity. Battery charger shall be like that of cordless telephone charging type and not of mobile phone type.
24	Battery charger	Compatible battery charger for Single Phase 230V, AC, 50Hz
25	Case for carrying and protection	Leather pouch with sling
26	Weight	Less than 500 grams with battery