POS Specifications

Sl. No.	Description	Specifications
1	Processor	**Secure Processor** capable of performing at least 10 transactions per minute in laboratory environment (Each Transaction consists of 1. Perform Biometric Authentication of the PDS beneficiary with UIDAI server 2. Generate Encrypted pay load for maximal Sales data. 3. Store Encrypted transaction data in the local storage 4. Transmit the Encrypted transaction sales data to PDS server. 5.Remove the locally stored sales data only after getting acknowledgement from the server)
2	OS	**Secure OS** having an inbuilt web browser supporting HTML5, CSS3, Java Scripts. (Source code of OS shall be CC compliant at least EAL level 2 certified or OS hardened and tested by an independent lab with a declaration of equivalence to CC EAL2)
3	Memory	256MB or Higher RAM and 1GB or higher Flash memory
4	Expansion slot	Micro SD Slot to support SD card with minimum 8 GB high speed SD card
5	Communication	Should support GSM Network with GPRS, Wi-Fi, Ethernet, PSTN
6	Interface	USB 2.0 or higher. The USB port should support device battery charging through any other USB charging source, RS-232 (optional)
7	Display	2.75 inch or higher color TFT Display supporting QVGA (320 x240) or better resolution.
8	Key Pad	Hard (Optional) QWERTY keypad
9	Battery	Swappable &Dry/Rechargeable 2600mAH or higher, Li-ion or Li Polymer battery capable of providing minimum 6 hours of operation while all function of device active.
10	Power Adaptor	Power Adaptor with surge protection and operating range 100 to 240V, 50Hz. AC input.
11	SIM & SAM slot	One or more GSM SIM slot and minimum one SAM slots for software up-gradation in device.
12	Printer	2" or higher Thermal / Non-Thermal Printer
13	Audio (Optional)	Good quality Speaker with 1W or higher output for announcements.
14	Finger Print Scanner	STQC certified Finger Print Module
15	IRIS Scanner (Optional)	STQC certified IRIS scanner Module
16	Smart Card (contact type) (Optional)	1 or 2 Number of Smart Card Reader & Writer (ISO 7816 Complaint)
17	Status Indications	Status indicator provides ease of use, Indicators for connectivity (presence/absence), signal strength, battery status.
18	Other Accessories	Durable Carry Case and user manual etc.
19	SDK	Appropriate SDK need to be provided along with the devices
20	Terminal Management	Device should be remotely manageable in secured mode

21	Environment, Health & Safety Durability, Humidity, EMI/EMC Compliance	Dry heat test- Operating (50 ±2˚C for 2 hrs) Cold test – Operating (0 ±3˚C for 2 hrs) Dry heat test (55 ±2˚C for 2 hrs) Damp heat Cyclic (40˚C for (12+12 hrs)), No. of cycles : 2 Cold Test (-10 ±3˚C for 2 hrs) Drop/Free Fall Test, in unpacked, switched off and normal handling conditions (Height : 100mm, Total no. of falls : 2) Vibration Test should be in packed condition, switched off conditions (10-150Hz, 0.15mm/2g, 10 sweep, cycles/axes) Bump test should be in packed condition, switched off condition.(1000Bumps, 40g, in vertical position)
22	Add-On Antenna	May be provisioned for the POS devices which will be used in remote locations and hilly areas for better signal reception and seamless transactions
23	Warranty	Suitable Warranty support

NOTE:

Mobile tablet devices should be preferred devices over POS devices for reasons of its cost, interoperability and easy maintenance.

1. **NIC will provide a working application based on Android**

2. **Vendor has option to**

   a. **To deploy and run NIC application in the device for its complete functionality or**
   b. **Build an application with same functionality exactly similar to NIC application in their device, in such a case the source code, every revised version of the source code and application shall be copyright of NIC.**

Mobile Terminal Specification

Sl. No.	Feature	Specifications
1	Display	7" inches or higher scratch resistant multi point capacitive touch screen with minimum WSVGA resolution (1024 X 600)
2	Processor Speed	1 GHz Dual Core or higher ARM /x86 processor or equivalent
3	RAM	1 GB or higher
4	Inbuilt Storage	4 GB or higher flash memory
5	Expansion Slot	At least a micro SD slot supporting up to 32 GB memory card
6	Audio	Good quality Speaker with 1W or higher output for announcements.
7	External Keyboard support (optional)	Device should support keyboard through USB or Bluetooth interface.
8	Connectivity	Device should support both 3G, GPRS and Wi-Fi, should support GPS feature
9	USB ports	At least one free USB port shall be available after setting up the entire solution including peripheral devices
10	Battery	Rechargeable 4000mAH or higher, Li-ion or Li Polymer battery capable of providing minimum 6 hours of operation while all function of device active.
11	Operating System	Operating system should be Linux (Latest Stable Kernel)/Android 4.0 or higher/Windows. Device operating system which supports HTML5 based web browser and CSS 3
12	Certification	RoHS (Restriction of Hazardous substance) CE or UL
13	Camera Barcode Reader	Capable of reading 1D line barcode and QR codes with minimum 5Mp auto-focus camera
14	Indicators	Status indicator provides ease of use, Indicators for connectivity (presence/absence), signal strength, battery status etc.,
15	SAM slot	Device should have at least a SAM slot to support secure loading of signed applications
16	Biometric Sensor	STQC certified Finger Print Module
17	IRIS Scanner (Optional)	STQC certified IRIS scanner Module
18	Smart Card Reader (Optional)	ISO 7816 Compliant
19	Environment & Durability	Dry heat test- Operating (50 ±2°C for 2 hrs) -Storage-55 ±2°C for 16hrs.in accordance with IS:9000/part-3/section-5/1977(reaffirmed in 2007). Cold test – Operating (0 ±3°C for 2 hrs) Storage-minus10degC For 4 hrs. at a temp. of 0 degree C in accordance with IS:9000/part-2/section-4/1977 (reaffirmed in 2007).

		Damp heat Cyclic --0perating-40˚C,95%RH for (12+12 hrs)), No. of cycles : 2 in accordance with IS:9000/part-5/section-1/1981 (reaffirmed in 2007).
		During last half an hour of each environmental conditioning as above and after recovery period of two hours the product be checked for 1:1 authentication
		Drop/Free Fall Test, in unpacked, switched off and normal handling conditions (Height : 100mm, Total no. of falls : 2)
		Vibration Test should be in packed condition, switched off conditions (10-150Hz, 0.15mm/2g, 10 sweep, cycles/axes)
		Bump test should be in packed condition, switched off condition.(1000Bumps, 40g, in vertical position)
20	Printer	Integrated or external
21	Antenna (mandatory)	Internal
22	Terminal Management	Device should be remotely manageable in secured mode
23	Warranty	Suitable Warranty support

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