

**BHOPAL SAHAKARI DUGDH SANGH MARYADIT
HABIBGANJ, BHOPAL 462024**



**Supply, installation and commissioning of Milk Testing Equipment
(DPMCU) Tender**

**CHIEF EXECUTIVE OFFICER
BHOPAL SAHAKARI DUGDH SANGH MARYADIT
HABIBGANJ, BHOPAL 462024**



BHOPAL SAHAKARI DUGDH SANGH MARYADIT

HABIBGANJ, BHOPAL 462024

AN ISO 9001 : 2015 Certified Organization

E-mail: bsdsim@gmail.com

Phone 0755-2478250-53 Fax : 0755-2450896

Ref No: 06

Dated: 19.01.2023

NOTICE INVITING E-TENDER

Online Tenders are invited for supply, installation and commissioning of **MILK TESTING EQUIPMENT (DPMCU)** at Bhopal Sahakari Dugdh Sangh from reputed manufacturer/distributor/dealer/suppliers. The tender documents containing the terms and conditions can be purchased online & downloaded through following website <http://www.mptenders.gov.in> from 20.01.2023 onwards. The tender will be opened in the office of the undersigned as mentioned in tender time schedule (key date). The detailed Tender Form can be seen (only for reference) at our HO website: www.sanchibhopal.com. Any changes in tender documents will be notified on above website only and not at any other sources/platforms, hence bidders are requested to visit the site regularly. The Chief Executive Officer Bhopal Sahakari Dugdh Sangh Maryadit has all the right to accept or reject any or all bids.

| Name of item | EMD (Rs) | Tender Fee (Rs) | Bid submission due date & time | Technical Bid opening Date & time |
|---------------------------------------|----------|-----------------|--------------------------------|-----------------------------------|
| Milk Testing Equipment (DPMCU) | 60,000/- | 1000/- | 09.02.2023 03:00 PM | 10.02.2023 03:00 PM |

CHIEF EXECUTIVE OFFICER

BHOPAL SAHAKARI DUGDH SANGH MARYADIT
HABIBGANJ, BHOPAL 462024
AN ISO 9001: 2015 Certified Organization
E-mail: bsdsim@gmail.com,
Phone 0755-2478250-53 Fax: 0755-2450896

TENDER DOCUMENT

| | | |
|----------------------------|---|---|
| Schedule I | : | General Terms & Conditions. |
| Schedule II | : | Terms, Conditions and Technical Specifications |
| Schedule III | : | Form A (To be downloaded filled manually & Scanned copy uploaded online.) |
| Schedule IV | : | Price Bid (Form-B) |
| Tender Cost | : | Rs.1000/-(One Thousand only) (Including GST, non- refundable) |
| Place of opening of Tender | : | Meeting Hall of The Bhopal Sahakari Dugdha Sangh Maryadit, Bhopal. |
| Address for Communication | : | The CEO, Bhopal Sahakari Dugdha Sangh Maryadit, Bhopal 462024 |

CHIEF EXECUTIVE OFFICER

General Terms & Conditions for Tender Submission & Supply

Bhopal Sahakari Dugdha Sangh Mydt, Bhopal (BSDSM), an ISO certified cooperative organization, invites online tenders from bonafide manufacturers and/ or their authorized dealers or other suppliers for supply, installation and commissioning of **Milk Testing Equipment (DPMCU)** strictly in adherence to the detailed specifications given in the schedule II of the tender documents.

Bhopal Sahakari Dugdha Sangh Mydt., Bhopal reserves the right to accept or reject any or all tenders, which in their opinion justify such actions, without further explanation to the tenderers.

1.0 DECLARATION :

The submission of a tender by a tenderer implies that he/she has read the notice and conditions of the tender and the terms and conditions of contract and has made himself/herself aware of scope and specifications of the supplies to be made and the destination where the supplies have to be made and satisfied himself/herself regarding the quality and specifications of the articles.

2.0 TENDER SUBMISSION:

- 2.1 Tenders received by e-mail will not be considered. However, amendments by e-mail to a tender sent will be considered, provided the same are received before the opening of the tender and confirmed by post.
- 2.2 The tenderer(s) should clearly state in their offer the address, telephone, fax, e-mail, PAN and GST Numbers. Any change in the address should immediately be communicated to the Chief Executive Officer, Bhopal Sahakari Dugdha Sangh Mydt, Bhopal and correspondence thereafter will be made at the changed address.
- 2.3 Negligence on the part of tenderer in filling the tender form offers him/her no right to withdraw the tender after it has been opened.
- 2.4 The acceptance of the tender and award of the purchase order will be the sole right of the Chief Executive Officer, Bhopal Sah. Dugdha Sangh Mydt. who does not bind himself to accept a tender in whole or in part or reject any or all the tenders received without assigning any reasons and no explanation can be demanded of the cause of rejection of the tender by any tenderer.
- 2.5 The Chief Executive Officer, BSDSM reserves the right to place order for whole requirement with any tenderer or split the orders among one or more tenderers or not to purchase at all any item even after rate approval.
- 2.6 Each tender should be accompanied with copy of PAN, GST, Company/Firm Registration and ITR of 2 Assessment Year (2020-21, 2021-22).
- 2.7 The tenderers should submit the rates online only. The conditional tenders are liable to be rejected.
- 2.8 No person or firm is permitted to submit more than one tender under different names.

- 2.9 The tenderer shall not sublet the contract or assign to any other party or parties, the whole or any portion of the contract without prior written permission of Chief Executive Officer, BSDSM.
- 2.10 OEM will be given preference. Copy of license is to be attached with tender for each item filled in.
- 2.11 Tenderer shall fill all the details of the unit in the enclosed form- A in schedule-III. (To be uploaded –mandatory.)
- 2.12 Consumables / Spares price list for current year is also required.

Bid Validity

Bid shall be valid for a period of 90 days from the date of opening.

Documents composing the Bid

Technical bid: (To be uploaded online mandatory)

1. Form A filled with copy of PAN, GST, Company/Firm Registration or Factory License, ITR of 2 Assessment Year (2020-21, 2021-22) and other documents as per bidder's check list.
2. Online EMD transaction acknowledgement or EMD exemption certificate (if applicable see **Sr. No. 3.2**)

Commercial/Financial Bid

- Commercial/Financial Bid form online (submit online in excel format only)

Bid price

- Price indicated on the price schedule shall be inclusive of pkg/frdg, freight. GST (to be shown extra)
- Evaluation Method– Total value wise evaluation.

Note:- When submitting EMD online please note that you pay only the EMD of particular item you would like to offer the rate. By choosing "Yes" option (in mptenders.gov.in portal) so as to enable you for EMD exemption.

3.0 Earnest Money Deposit (Rs.60,000/-)

- 3.1 EMD should be submitted online only and attach copy of proof for payment of EMD in technical bid.
- 3.2 **MSME industries of The Madhya Pradesh State** will be exempted from payment of the EMD fee of the tender. (MSME Certificate to be uploaded online mandatory)
- 3.3 Any tender which is not accompanied by Earnest Money deposit are liable to be rejected. Earnest money deposit of unsuccessful tenderers will be returned within 90 days from the date of opening of the tender. The earnest money deposit of the successful tenderers will be released on completion of supply/work as the case may be within the stipulated period.
- 3.4 No interest will be paid on the earnest money for the period during which (the EMD) lies in deposit with Bhopal Sahakari Dugdha Sangh Maryadit.
 - EMD may be forfeited :
 - If successful Bidder/supplier fails/denies to perform work.
 - If any bidder/supplier withdraw its bid during the bid validity period.

4.0 PRICES:

- 4.1 Prices offered by the tenderers should be firm and free from all escalations and shall be valid at least for a period of 12 months from the date of approval of rates. BSDS will have the right to extend the validity of the tender approval by 6 months. We would communicate our rate approval within 60 days of opening of tender.
- 4.2 The tenderer should quote rate on FOR dairy plant Bhopal basis (GST shall be extra)
- 4.3 If need be, negotiations will be done for prices and as well as terms & conditions of material supply as per CVC guidelines only with the party which offers the lowest rate.
- 4.4 The prices charged for the material supplies under the contract by the supplier firm in no event shall exceed the lowest price at which the supplier firm sells the material of identical tender description to any other persons/ firms during the period and until the execution of all supply orders placed during contract period.
- 4.5 The lowest rate shall not be the only criteria for approving the tender.
- 4.6 The Milk testing equipment (DPMCU) shall be covered under one year warranty period from the date of supply.

5.0 MODE OF DESPATCH:

- 5.1 The material to be supplied by successful firm shall be dispatched to the dairy under prior intimation. Depending upon the type of material, the supplier shall have to carry out proper packing/crating to avoid damage during transit.
- 5.2 Wharfage/Demurrage etc. on account of incorrect or delayed dispatch of material/documents shall be the responsibility of supplier and shall be recovered from the bills.
- 5.3 Delivery Period is 45 days from date of Purchase Order.

6.0 LIQUIDATED DAMAGES:

- 6.1 Delivery date are fixed for supply of material they shall be strictly adhered too. In case they are not followed, or in case of delay in execution or non-execution of the order, the Dugdha Sangh reserves the right either to cancel the order and make alternative purchases from other sources, at the risk and cost & expenses of the defaulting supplier. In case the supplies are not affected as per the schedules, the liquidated damages may be charged on the goods not so delivered as under:-

| Sl.No. | Duration of delay | Liquidated Damages |
|--------|-----------------------|---------------------------|
| 1. | Upto 15 days | 1% cost of the unit. |
| 2. | Between 16 to 30 days | 2% cost of the unit |
| 3. | Beyond 30 days | Upto 5% cost of the unit. |

- 6.2 If the tenderer fails to make supply as per purchase order without any valid reason, the order would be treated as cancelled and the firm may be blacklisted for future dealings and EMD also would be forfeited by the management.
- 6.3 If the qualified tenderer fails to make supply the materials as per specification/material quality/printing as per BSDS's approved specification, then the entire requirement shall be fulfilled through the other bidders and if the other bidders didn't agree to supply the material on L-1 approved rates the difference amount would be charged from deposited EMD or their pending bills of L-1 bidders.

7.0 INSURANCE:

Insurance is to be arranged by the tenderer.

8.0 INSPECTION:

All the supplies are subject to inspection at our plant before acceptance. If goods are rejected due to defective or wrong supply, the report of our authorized official in this respect shall be FINAL and no correspondence on the subject would be entertained. The rejected goods should be removed from our premises by the tenderer within 15 days after receipt of our inspection report failing which the same shall be returned to the supplier at their risk and expenses or disposed off in Auction and the proceeds, if any, less expenses would be credited to tenderer's account.

9.0 PAYMENT:

- 9.1 70 % against delivery of machine/equipment in good condition at site and after physical inspection and verification by concern department.
- 9.2 Balance 30% within 30 days of after commissioning and successful trial run of machine/equipment at site.

10.0 WARRANTY:

All the Supplied items shall be warranted for one year from the date of receiving of material at the union.

11.0 TERMINATION OF CONTRACT:

If any act of commission or omission of a unit under contract brings Bhopal Sah. Dugdha Sangh Mydt. to dispute, then Bhopal Sahakari Dugdha Sangh Mydt. shall be competent to debar/blacklist the unit from further business.

12.0 SIGNING OF AGREEMENT:

Successful tenderer shall sign into an agreement with BSDSM, Bhopal in the non-judicial stamp paper of Rs.1000 /- within 15 days after receipt of rate approval order. Draft of agreement will be provides by BSDSM, Bhopal to the successful tender.

13.0 CONSEQUENCES OF BREACH OF AGREEMENT:

If any firm under the contract commits breach of any of the conditions, it shall be lawful for the Chief Executive Officer, Bhopal Sahakari Dugdha Sangh Mydt. to cancel the contract and to purchase material from any other alternate sources on the risk and cost of the defaulting unit.

14.0 FORCE MAJEURE:

- 14.1 Failure or delay in the part of bidder for supply due to force majeure causes enumerated here under shall be considered, provided the supplier produces documentary evidence.
 - i. Any cause which is beyond the reasonable control of the bidder.
 - ii. Natural phenomena, such as floods, drought, earthquakes and epidemics.
 - iii. Act of any Govt. Authority, domestic or foreign, such as wars declared or undeclared quarantines, embargoes licensing control on production or distribution restrictions.
 - iv. Accident and disruptions such as fire, explosion, increase in power cut with respect to date of tender opening etc.
 - v. Strikes, slow down and lockouts.
- 14.2 The cause of force majeure condition will be taken into consideration only if the supplier notifies within 30 days from the occurrence of such eventualities. The purchaser shall verify the facts and grant such extension as the facts justify. For extension due to force majeure

conditions, the supplier shall submit his representation with documentary evidence for scrutiny by the purchaser and decision of the purchaser shall be binding on the time.

15.0 DISPUTE ARBITRATION & FINAL AUTHORITY:

- 15.1 It should be clearly understood that in the event of a successful tenderer failing to accept and execute the supply order, then decision of the Chief Executive Officer, Bhopal Dugdha Sangh Mydt., in this respect will be final and binding on the successful tenderer.
- 15.2 In any case of dispute between material/services supplier and Bhopal Dugdha Sangh Mydt matter will be present to MD, MPCDF for resolution.
- 15.3 All disputes between tenderers and BSDS matter will be put to MD, MPCDF for resolution. In case no resolution action will be taken as per Arbitration Act 1996.
- 15.4 For all disputes, the venue for legal course shall be at Bhopal.
- 15.5 If the tender opening date become any govt. holiday then the next day may considered for tender opening.

Chief Executive Officer
Bhopal Sahakari Dugdha Sangh Mydt. Bhopal

@@@@@@@@

Technical Specification of Milk Testing Equipment (DPMCU)

Technical Specification of Data Processor Based Milk Collection Unit

1. Functional Requirements:

- The Unit should be suitable for instant weighing of milk, measuring fat & SNF content, calculating the amount payable to the member based on FAT and/or FAT & SNF weight, printing the amount calculated thereof with member identification details. The Unit shall also be used for maintaining the main records of the collection centre together with the details of milk business transactions of the village milk co- operative society.
- The Unit should be able to measure milk component contents viz. fat from 0.5 % to 12 % & SNF from 6% to 12 % and able to weigh milk up to 200 kg per batch at a time. This should process approximately 70 samples of milk per hour.

2. Design & Other Requirements:

- The DPMCU specs detailed below are minimum required specification. The vendor has to provide for all the components/ tools/ software required for meeting operational & functional requirement. Bidders can offer better & higher version specs if available with them which could be considered, but without any extra weightage.

Operating Environment:

All the components of the DPMCU should be rugged and must operate in dusty, hot and humid village environment where power outages and supply fluctuations are frequent. The operators may not be skilled persons and not conversant in using electronic equipment:

1. Power supply: 160 to 260+10 % V (AC); 50 Hz + 3% or 12 V (DC)
2. Ambient Temperature: 5 - 50 C
3. Relative Humidity: 50 % to 95 %

Operational provisions:

Installation: All the components of the DPMCU should be installed by the supplier to the satisfaction of the user.

Warranty: All the components included in the DPMCU shall be warranted for 01-year comprehensive warranty from date of supply except Burnt & broken items are not covered. Supplier to ensure the installation and commissioning of proper earthing before start of actual operation of DPMCU.

ERP: Integration with any ERP or existing software will be managed by supplier. Supplier needs to provide all the required support in integration with ERP or any existing software.

The supplier should also provide Annual Maintenance Contract after one-year warranty period on chargeable basis, if felt necessary by the purchaser.

Training

- Comprehensive training for 01 day in class room
- Hands-on training for 02 shifts of milk collection on all operational aspects of the milk analyzer and other DPMCU components to the staffs at Village level and other officers of the Milk Union.
- Between 1st & 2nd month of installation refresher training in group shall be imparted at a nodal location.
- Operational & Cleaning SOPs (including leaflet on troubleshooting) - Provide laminated wall chart indicating important steps involved in operation & cleaning of the Milk Analyzer for displaying in the Collection Centre.

Scope of Work:

- This is a complete job for supply, installation, testing and commissioning of the DPMCU system which can collect all milk collection data at DCS level.
- The Unit should be suitable for instant weighing of milk, measuring fat, SNF & water content, calculating the amount payable to the member based on fat, SNF& weight, printing the amount calculated thereof with member identification details.
- Integrated unit shall consist of Data processor to accept data from electronic Weighing Scale, Milk analyzer & Milk producer detail manually entering, process milk billing & write processed data on pen drive or print in report format.
- Automatic tare option for Weigh Scale to allow multiple entries of can by any single member.
- System should be able to capture data from electronic weighing scale and milk analyzers which can transfer data through RS-232 serial port
- System must be easy to operate, safe and secure and prevented from unauthorized access.
- Comprehensive warranty for Two year.
- Ensure proper and accurate functioning of all the components of the DPMCU and impart training to the operating staff in operation, maintenance and routine check till the operating staffs are confident in operation and routine maintenance.

Specification for Data Processor Milk Collection Unit (DPMCU) for Milk Pooling Point (MPP) at Village level

- Data processor is to be used at village society level, so should be simple, rugged and easy to operate with appropriate functional keys. Salient features of data processor are

1. TECHNICAL SPECIFICATION FOR DATA PROCESSING UNIT (DPU)

| | | |
|----|-------------------------|--|
| 1 | Operational Requirement | Provision of import of Producer master, Rate chart data from Milk Union/main dairy plant through pen-drive (USB/ Serial/Smart Card) Based on therequirement. |
| | | To accept data from electronic weighing machine, milk analyzer after enteringthe milk producer code number manually. |
| | | Data transfer from DPU through pen drive (USB/Serial) to other computerThrough a customized utility software. |
| | | Reports as under: |
| | | Producer Slip in English |
| | | Customized reports as per Milk union requirement with possible inputs. |
| | | Entering of Milk Rate Chart by Pen drive (USB / Serial). |
| | | Two set so rate charts (Buff. & Cow both), one for current & other as“Effective from date ”. |
| | | Rate chart type to support –Fat; FAT & SNF-As required by purchaser |
| | | Data backup through USB Pen Drive. |
| | | Input services data entry and storage. |
| | | To develop, if any additional report required by purchaser |
| 2 | Body Type | Stainless Steel |
| 3 | Screen | 7-inch Colorful TFT Screen |
| 4 | Printer | Inbuilt 2-inch Thermal Printer |
| 5 | Keyboard | Standard Keyboard (qwerty type) |
| 6 | Connectivity | RS 232 |
| 7 | Technology | ARM STM32F429IGT6, 32 Bit Microcontroller Based |
| 8 | Memory | 8GB with 10Year Data Storage Facility |
| 9 | Power Supply | 140-270V for AC and 12V for DC |
| 10 | Operation | Flexible to change as per Customer Requirements |

| | Requirement | |
|----|-------------------|--|
| 11 | Firmware upgrade | Firmware upgrading by USB interface and through central server |
| 12 | Rate Chart | Uploading of milk price chart by encrypted pen drive (USB) and / or online transfer. |
| 13 | GPRS Connectivity | 4G Modem with dedicated SIM slot |

2. TECHNICAL SPECIFICATION FOR MILK ANALYSER CUM STIRRER

| Sr. No. | Particulars | Specification |
|---------|------------------------|--|
| 1 | Functional Requirement | <p>A) To test & display fat, SNF & added water of sample milk. MILK ANALYSER should have facility to communicate with DPU</p> <p>B) Milk Analyzer shall have alert for cleaning of the analyzer and finally at the time of shift closure should alert for flushing/ cleaning.</p> <p>C) Cleaning Alerts: Shut Down by proper functionality of water sucking in while shut down, Interlocking for Cleaning /Flushing: Analyzer should initialize the Flushing/cleaning cycle when switched Off after shift closer or shut down by switching of the Analyzer.</p> |
| 2 | Type | <p>Ultrasonic principle based</p> <p>Measuring Range:</p> <p>1) Fat: 0.5% to 12% or more. Accuracy +/- 0.1% Resolution: 0.01% Repeatability: +/- 0.05 %</p> <p>2) SNF: 6% to 12 % or more Accuracy +/- 0.15% Resolution: 0.01% Repeatability: +/- 0.05 %</p> <p>3) Added water: 0% to 60% Accuracy +/- 5%, Resolution: 1% Repeatability 0.5%.</p> <p>4) Density = 1.0220 g/cm³ to 1.0360 g/cm³ Accuracy +/- 0.0005 g/cm³</p> <p>5) Measuring cycle- 38 sec. / Sample</p> <p>6) Average testing speed – Min. 70 samples/ hrs.</p> |
| 3 | Operational abilities | <p>7) Mode selection: 1. Type of milk – Cow / Buffalo / Mixed 2. Cleaning,</p> |

| | | |
|--|--------------------------------|---|
| | | 3. Calibration, 4. System error list etc. |
| 4 | MoC for enclosure | AISI 304 (With Certificate of Confirmation of AISI 304), min 0.75 mm thick, dairy finish |
| 5 | Loose Accessories | 1. Holding bottom tray for spillage- 1 No. 2. RS 232 Serial Cable- 1 No. 3. Power cable with plug top- 1 No. 4. Measuring mugs - 2 No 5. Daily cleaning solution - No. of Bottle 3 (Quantity minimum 200 ml each or equivalent). 6. Weekly cleaning solution - No. of Bottle 2 (Quantity minimum 200 ml each or equivalent) |
| 6 | Manual | Operating Manual each in English & as per local language |
| 7 | Operating Voltage | 12V DC 3.0 Amps |
| 8 | THERMOSTAT CUP | Use for Analyzer flushing and cleaning for breakdown reduction and system improvement. The Cup for providing hot water with auto cut off. It should have a base to fit-in the Analyzer Suction cavity. Specifications: D) Hot Water Cup for Cleaning with auto-shut off. E) Water Storage Volume: minimum 10-15 ML F) Temperature range and Time: 0 Deg to 70 Deg C. in not more than 60 sec. G) Operation Input DC Volt: 12V, H) Control: Thermostat, Auto Cut off at 65°C. I) Milk Analyser Cleaning only. J) Holding Arrangement: Base Platform to hold the cup in Milk Analyser |
| ULTRASONIC STIRRER MUST BE COMBINED WITH ANALYSER IN A SINGLE BODY: | | |
| 9 | Functional Requirement | To remove air from fresh milk sample by vibrations created by the stirrer |
| 10 | Type | Table top, Ultrasonic Stirrer |
| 11 | Stirrer for Ultrasonic Stirrer | SS Ball type |
| 12 | Ultrasonic Frequency | 20-25 KHz (Variable) |
| 13 | Timer | 1-35 (Max.) Sec. Typicle-13 sec. (selectable) Digital Display. |
| 14 | Environment | Suitable for dusty / humid village environment, operating temperature -5 to 50 Degree C |
| 15 | Connecting Cables | Minimum 1.5 m Power cable with plug top. |
| 16 | Complete ready to use | Item complete in all respect with required electric/ electronic parts, ready for use at site. |
| 17 | Operating Voltage | 10.5 to 16 Volts DC 2.2 amps. Approx. Over Voltage and Under Voltage Protection. |
| 18 | MoC for body | AISI 304 (With Certificate of Confirmation of AISI SS 304), min 0.75 |

| | | |
|----|-------------------|---|
| | | mm thick combined with Milk Analyser Body Model |
| 19 | Power Consumption | As per design |

3. TECHNICAL SPECIFICATION FOR THERMAL PRINTER

| Sr. No. | Particulars | Specification |
|---------|---|--|
| 1 | Printing Method | Thermal Line Printing |
| 2 | Installation | Horizontally |
| 3 | Standard Accessories | Roll Paper x 1(for checking the initial movement of the printer,12V-DC cable, RS-232 Cable |
| 4 | Font | 9x17 / 12x24, Hanji Font: 24x24, Thai Font: 9x24 / 12x24 |
| 5 | Character Size (W x H) | 0.88x2.13mm / 1.25x3mm, Hanji Font: 3x3mm, Thai Font: 0.88x3mm / 1.25x3mm |
| 6 | Character Set | 95 Alphanumeric, 18 set International, 128x43 pages (including user-defined page) Hanzi: Simplified Chinese: GB18030-2000:28,553 Barcode: UPC-A, UPC-E, JAN13(EAN13), JAN8(EAN), CODE39, ITF, CODEBAR (NW-7), CODE93, CODE128, GS1-128, Gs1 Data Bar Two-dimensional code: PDF417, QR Code, Maxi Code, 2D Gs1 Data Bar Composite Symbology |
| 7 | Characters Per Inch | 22.6cpi / 16.9cpi, Hanji Font: 7.8cpi, Thai Font: 22.6cpi / 16.9cpi |
| 8 | Interface | Serial RS-232, |
| 9 | Buffer | 2048K bytes, NV Flash: 256K bytes |
| 10 | Print Speed | Max 120mm/s |
| 11 | Dot Density | 208x208 dpi |
| 12 | Paper (Roll Paper (Width & Roll Diameter) | 57.5 ± 0.5 (W) × dia. 83.0 |
| 13 | Power | DC +12V ± 5% |
| 14 | Operating | Approx. 3A (Mean/Print ratio 18% with print pattern) |
| 15 | Standby | Approx. 0.1A (Mean) |
| 16 | Baud Rate | 9600 |

4. TECHNICAL SPECIFICATION FOR REMOTE DISPLAY UNIT (RDU)

| S No. | Particulars | Specification |
|-------|------------------------|---|
| 1 | Functional Requirement | To display pourer members milk collected & milk testing and other. selected parameters. Display unit should have facility to communicate with DPU |
| 2 | Type | Wall mounted type |
| 3 | Display Parameters | i) Member's code-3 digits; |
| | | ii) Cattle Type - 1 character, |
| | | iii)Milk Weight - 5 digits; |
| | | iv) Fat % - 4 digits; |
| | | v) SNF % - 4 digits; |

| | | |
|---|--------------------|--|
| | | vi) Rate in Rs - 4 digits; |
| | | vii) Amount in Rs. - 5 Digits |
| 4 | Interface | RS - 232 |
| 5 | Display Type | 7 Bright segments, Red LED, 25 MM, 33 No. 11 in each row with 3 rows (or suitable to meet the requirement) |
| 6 | Labels for display | Screen printed |
| 7 | Environment | Dusty, Humid, preferably housing to be with Rust proof powder Coated metallic. |
| 8 | Connecting Cables | 1. Minimum 5m Power cable with plug top, 2. Minimum 5m Data cable with connector at both ends |

5. TECHNICAL SPECIFICATION FOR ELECTRONIC WEIGHING SCALE

| Sr. No. | Particulars | Specification |
|---------|--|---|
| 1 | Functional Requirement | To Electronically weigh & digital display of milk quantity in litre in a container. ELECTRONIC WEIGHING SCALE should have facility to communicate with DPMCU If the quantity of milk from a member is >200 lit/shift, then EWS shall have the provision to add quantities weighed on the same EWS multiple time and add them, send the added quantity to DPU. |
| 2 | Capacity | 200 kg |
| 3 | Least Count | 20 gm |
| 4 | Weight Accuracy | 20 gm as per Standards of W&M/ Legal Metrology 1986 Rules medium accuracy Class III |
| 5 | Certification & Stamping | Duly certified and stamped by W&M/ Legal Metrology department and confirming to IS: 9281(pt 1&2)1979, IS: 9281:1981 and IS: 9281(Pt.4) 1983 as amended up-to-date. |
| 6 | Display Resolution | 1/10,000, (accuracy class III) |
| 7 | Load Cell | Single, IP 67, grade SS of certified and approved make ADI ARCTECH Or Equivalent |
| 8 | Over load & shock load protection | Plate form stopper, Transport and travel bolt for Loadcell protection 4 Nos. 300% to take impact of loading, with audio (beep) visual indication |
| 9 | Platform Size | 600 mm x 600 mm |
| 10 | Platform Material | AISI SS 304,1.6 mm thick, 150 grit top plate |
| 11 | Platform under frame material / Design | Cold rolled steel box of adequate size. With rust proof marine paint after fabrication All screw j bolts & nuts to be of SS-304 |
| 12 | Indication in display EWS unit | Dual Display, Quantity-7 Segment RED LED, 6 digits, minimum 13 mm height, display for mode of operation- zero, tare, kg/litre, by default litre |
| 13 | Display Unit mounting | Pole mounted type with sturdy base and SS 304, 38 mm dia. Pipe, 1.2 m high SS Body IP 55 Tactile switch keys with feedback response, auto calibration & auto span with drift correction, RS 232 serial port with protocol to meet requirement of interface |

| | | |
|----|--|--|
| | | compatibility |
| 14 | Calibration protection & Sealing Arrangement | Special arrangement to house PCB & sealing arrangement. |
| | | Pass word protection at user end. |
| 15 | Load cell Cable | Load cell cable from platform to display unit with reinforced heavy duty PVC conduit |
| 16 | Battery for working on power failure | In built, 6V capacity minimum for 12 hrs. |
| 17 | Model Approval Certificate | Manufacturer to have model approval certificate of Legal Metrology. |
| 18 | Stamping at site | Supplier to arrange stamping of each scale at site from local Weights & Measure Inspector before installation. |

6. Power Back-up Solution:

| Sr. No. | Particulars | Specification | |
|---------|---------------------------|--|--|
| 1 | Functional Requirement | The Power Back-up system for Data Processor Mlik Collection Units (DPMCU) is required to install in rural areas at milk collection points. This system consisting with battery must be able to run the entire system on battery when Grid Power goes off for minimum 2 hours in a shift. | |
| 2 | Average Output Power load | 300 Watts minimum approx. | |
| 3 | Back up time (Full Load) | 2-hrs minimum (in one shift) | |
| 4 | Output sockets | Suitable number of sockets as required for the respective components of DPMCU. | |
| 5 | Min. Battery Size | 1 x 100 Ah | |
| 6 | Battery Charging | <ul style="list-style-type: none"> • Grid Charging: At 110 & 300 V AC with SMPS charger • Boost charging at minimum 7A Approx. • Battery overcharge protection | |
| | | Battery Type | Industrial Tubular low maintenance battery |
| | | Battery feature | Battery level indicator |
| 7 | Battery Rating | 12 V, 100 Ah. | |
| | Battery units | 1 No. | |
| | Charging Indicator | Battery charging indicator plus low battery/fault indicator to be provided | |
| | Leads for Connection | Suitable connecting cables required for the respective items of DPMCU. | |
| 8 | Operating Environment | Temp 5-50 Deg. C; RH-85% non-condensing, Dusty Environment | |



**BHOPAL SAHAKARI DUGDHA SANGH MARYADIT,
HABIBGANJ, BHOPAL 462024**

SCHEDULE – III

**Form – A
(To be uploaded -mandatory)**

Chief Executive Officer
BSDSM, Bhopal

Date:

Dear Sir,

I/We hereby furnish below some particulars about our company/unit which will form a part of our offer submission:

1. Name of the Co./Unit : _____
2. Address of the Co./Unit : _____

3. Telephone Nos.(with STD Code): _____
FAX No. : _____
Email ID : _____
4. Name of the CEO/Proprietor/: _____
Partner
5. Name and designation of other : _____
Authorized signatory of the Co./Unit
6. Particulars of Regn. Certificate : _____
Issued by the competent authority
(Regn No. & Date)
7. We are manufacturer/distributor/dealer/supplier:
8. GST NO dtd.....
9. PAN Number (Permanent Account Number- Income Tax) :.....
10. Have your Co./Unit or its sister concern ever been black listed/ debarred by BSDSM or its sister Milk Unions or GOI /GOMP & its undertaking ? YES / NO.
11. I/WE HAVE READ THE TERMS AND CONDITIONS OF THE TENDER DOCUMENT WHICH ARE ACCEPTABLE TO ME/US. NO ADDITIONAL CONDITION DEVIATION OR POINT OF DIFFERENCE HAS BEEN GIVEN BY ME/US. I AM PROPRIETOR/MANAGER/DIRECTOR..... OF THE TENDERING FIRM AND HAVE BEEN AUTHORISED TO SUBMIT THE AUTHORITY LETTER IN THIS REGARDS IS ENCLOSED HEREWITH.

**Seal & Signature of the
Authorized Signatory of the Co./Unit**



**BHOPAL SAHAKARI DUGDHA SANGH MARYADIT
HABIBGANJ, BHOPAL 462024**

SCHEDULE – IV

**Form – B
(To be submitted Financial Bid Online only)**

| S. No. | DESCRIPTION | Rate/unit F.O.R Bhopal Dairy (GST shall be Extra.) |
|---------------|---|---|
| 1 | DPMCU | ---online only--- |
| 2 | Comprehensive AMC Prices for 3 rd year (after two year warranty and free services) | ---online only--- |

Note: Purely indicative for e-tender as the rates are required to be filled on these lines in the prescribed BOQ in Excel format.

BIDDER'S CHECK LIST BEFORE TENDER SUBMISSION

(To be uploaded all mandatory documents scanned copy with seal and sign, online mandatory)

Note: - All the documents are necessary in technical bid. Lack of any document in the technical bid may lead to disqualification of the tender.

| S. No. | Tender Submission Check Points (mandatory documents) | Check before submission (write Yes or No) |
|--------|---|--|
| 1. | Online tender Fee and EMD payment transaction acknowledgement or EMD exemption MSME certificate copy | |
| 2. | Form A of Schedule-III (with seal & sign) | |
| 3. | The Authority letter on letter head (with seal & sign) as per Clause no.11 of Form-A, Schedule-III. | |
| 4. | PAN Card Copy (with seal & sign) | |
| 5. | GST Certificate Copy (with seal & sign) | |
| 6. | Company/Firm Registration or Factory License Copy (with seal & sign) | |
| 7. | ITR of 2 Assessment Year (2020-21, 2021-22) (with seal & sign) | |
| 8. | Undertaking by the bidder that the bidder is not black listed by any Co-operative Milk Union/ State Milk Federation/Govt. Agencies. | |
| 9. | Audited profit and loss account for the year 2020-21 to 2021-22 | |

**Seal & Signature of the
Authorized Signatory of the Co. /Unit**