

**MAHARASHTRA STATE ELECTRICITY TRANSMISSION CO. LTD.**  
**CIN No. U40109MH2005SGC153646**

From,  
 Executive Engineer, MSETCL EHV O&M Division, Sangli.  
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Ref. EE/EHV O&M/DN/SGL/TDN/

00138/2025-26

Dtd 30 JAN 2026

**Budgetary offer**  
 (Through MSETCL webpage)  
**TO WHOM SO EVER IT MAY CONCERN**

Dear Sir,

The budgetary offers through email/By Hand/By Post are invited for - Providing & fixing of Micro-processor based 0.2S Class, Touch Screen / Push Button enabled, 3 Ph, 4 Wire MFM Meters at various substations under EHV O&M Division, Sangli as per Schedule A. You are requested to quote your lowest rates for tentative quantities as per Schedule A attached herewith.

**SCHEDULE 'A**

Sr No.	Description	Unit	Qty	Ex Work Rate
1	Providing of Micro-processor based 0.2S Clas, Touch Screen / Push Button enabled, 3 Ph, 4 Wire MFM Meters	EA	1	
2	Fixing of Micro-processor based 0.2S Clas, Touch Screen / Push Button enabled, 3 Ph, 4 Wire MFM Meters	EA	1	

**Note-The above rates are Exclusive of all taxes and charges.**

**Specification of Microprocessor Based Multifunction Energy Meters:-**

**Technical Specifications for Microprocessor Based Multifunction Energy Meters:**

Sr.No	Particulars	Desired by purchaser
1	Manufacturers name or country of manufacture.	Should be specified by supplier
2	Type/Model details of equipment.	Should be specified by supplier
3	Indian / International standards for the offered MFM shall be as per clause -2.0 of TS.	Yes required
4	Type of Mounting	Panel mount flush type, Indoor installation
5	Accuracy class: • Active energy measurement • Reactive energy measurement	0.2S as per IS:14697 0.5S as per IS:14697
6	VT secondary	100...500V L-L (57.7 ... 288V L-N) (Programmable on site)
7	VT Primary	11kV...765kV LL (Programmable on site)

8	Measuring Voltage range	Upto 120% of rated value
9	Impulse withstand capacity	6kV
10	CT secondary	$Ib = 1A$ to $5 A$ (Programmable on site)
11	CT Primary	1.....9999A (Programmable on site)
12	Measuring Current range	10mA to 6A
13	Minimum Starting current	0.1% $Ib$ at UPF
14	Maximum current	$1.2 \times Ib$
15	Current Overload withstand capacity	$20 \times I_{max}$ for 0.5sec at rated frequency (CAT-III)
16	Frequency in Hz	50Hz+5%
17	Sampling Frequency	6kHz per Phase or better
18	AC/DC Auxiliary supply	48-300 V DC or 85-300V AC
19	Power consumption per phase: • Voltage Circuit • Current Circuit • Auxiliary supply	<ul style="list-style-type: none"> <li>Voltage circuit &lt; 1.5W &amp; 10VA/phase,</li> <li>Current circuit &lt; 1.0VA/phase @1A Ibasic&amp; @5A Ibasic,</li> <li>Auxiliary supply: &lt; 10.0VA with RS485 communication port</li> </ul>
20	P.F. range	Zero (lagging) through unity to Zero (leading)
21	Operating temperature range for meter in Deg C.	-10°C to 55°C
22	Storage temperature range for meter in Deg C.	-25°C to 70°C
23	Non condensing operating humidity range for meter in %.	<75% RH (Annual minimum)
24	Display type	Graphical TFT/LCD with backlight or large four line seven segment seven digit display with Green backlight or Colour TFT display.
	Display Parameter Digit Resolution	Upto six decimals
	No. of simultaneous display parameters	4 or 5
25	Device dimensions in mm (H x W)	96 x 96
26	Display units for Energy &Power	Programmable on site (Kilo/Mega/Giga for Energy & Power)
27	Calibration LED	Programmable on site for import/export Active & Reactive Energy.
28	Ingress Protection class	Front: IP 54, Rear: IP20
29	The quoted MFM model should be type tested as per IS:14697 from Third party NABL accredited lab & reports not be older than Five years.	Yes required
30	Warranty support required - MFM shall be warranted for 120 months from the date of supply.	Yes required
31	The meter shall have following dual communication capabilities:	Yes required

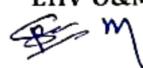
	<ul style="list-style-type: none"> <li>• RS485 port (MODBUS RTU)</li> <li>• TCP/IP Ethernet (Optional)</li> <li>• Pluse input/output module (Optional)</li> <li>• IEC 61850 (Optional)</li> </ul> <p>(Expansion capability via add-on pluggable Ethernet module)</p>	
32	Load survey data for 45 days or 60 days at 5 or 15 minutes integration period shall be available.	Yes required
33	Maximum demand support with integration period of 5,15,30 minutes.	Yes required
34	Daily/Midnight energy snapshot (Values) for 45 days shall be available.	Yes required
35	MD Reset provisions <ul style="list-style-type: none"> <li>• Auto</li> <li>• Manual</li> </ul>	Yes required
36	Average THD measurement for voltage, current and power upto 63rd harmonic.	Yes required
37	Billing parameters shall be recorded in meter	Yes required

**Note:-**

- 1) Please note that said budgetary offer is only for estimate purpose & not considered for any bidding & no work order will be issued based on this Enquiry.
- 2) All interested bidders are requested to submit their best reasonable budgetary offer for above works on **Email ID: ec3120@mahatransco.in/** By Hand/By Post upto 18:00 Hrs on Dtd.09.02.2026

Thanking you,

Yours' faithfully

  
**N. Roshan**  
 Executive Engineer  
 EHV O&M Division, Sangli  
  
**S. M.**