

File No.: DSM Cell - 4072/16

Date: 14/05/2024

Notice Inviting Tender / e-Tender / Quotation

Thrissur Corporation Electricity Department invites sealed quotation / open tenders / e-Tenders from eligible applicants, who fulfill the qualification criteria as stipulated in the Store Purchase Manual Kerala, Kerala PWD Code & LGSD Tender regulations for the Supply / Work mentioned in the below-tabulation sheet.

The details of the Tender are as per following :

Approximate Cost of Supply / Work	:	250,000/- (Including GST)
Supply / Work Description	:	Supply & Installation of 50KW Solar Inverter as per specifications attached
Tender Security / EMD / Amt.	:	Rs 2500/-
Cost of Tender Form	:	Rs 500 + 60 (GST) = Rs 560/-
Tender Document on Sale	:	
A.S. approved by	:	Hon'ble Mayor's pre approval
T.S. approved by	:	Electrical Engineer & TCED
Last Date & Time of issuing Tender Form	:	31.05.2024 2.30 pm
Last Date & Time of Submitting Tender	:	31.05.2024 3.30 pm
Date & Time of Opening Tender	:	31.05.2024 4.30 pm
Authority & Place for submit of Tender	:	Electricity Department, Thrissur Corporation - 680001

- \* Sale of Tender form available only after 2. P.M. everyday once tender floated.
- \* Applicants must have GST Registration
- \* Quoted rate should be inclusive of relevant Taxes
- \* Tender inviting officer shall have every right to revoke tender / quotation at any time without any reason
- \* Those who participate in work tender should own concerned electrical contract licensee.



14/5/2024  
Assistant Secretary  
K. S.

## 50 KW INVERTER SPECIFICATIONS

<u>Input DC</u>	
Max.DC input power(KW)	55
Max.DC input Voltage(V)	1100
Start-up Voltage[V]	195
MPPT Voltage range(V)	200-1000
Max input current per MPPT(A)	28.5A+28.5A+28.5A+28.5A
Number of MPPT	4
Max input Strings Number	12
<u>Output (AC)</u>	
Rated output power(kw)	50
Max.output power[kw]	55
max.output Current[A]	83.3
Grid voltage range(v)	304-460
Grid Frequency range(Hz)	47-52 or 57-62
Power Factor(at rated output power)	0.8...1...0.8
Total Harmonic Distortion(THD)	<3%
Feed-in phase/connection phase	
<u>Efficiency</u>	
Max.Efficiency	98.80%
MPPT Efficiency	>99.5%
<u>Protection</u>	
Inbuilt Protection	DC Reverse polarity protection,short circuit protection,O/P over current protection,O/P overvoltage protection,insulation resistance monitoring,residual current detection,surge protection,islanding protection,temperature protection,integrated DC switch(optional)
<u>Interface</u>	
DC Connection	MC4 Connectors
Display	LCD,2X20 Z
Datalogger&communication	4 pins RS485 connector,2 RJ45 connector,2 group of terminal block
General Data	
Topology	Transformerless
Consumption @ night	<1w
Operating temperature range	- 25 degree to 60 degree
Cooling method	intelligent redundant fan cooling
Relative Humidity	0 to 100%
Max.operational Altitude	4000m
Noise[dBA]	<60 dBA
Designed Lifetime	>20 years
Ingress Protection	IP65
Dimensions(W*H*D)[mm]	630W*700H*357D
Netweight(kg)	63
<u>Standards</u>	
Safety/EMC	IEC 62109-1/-2,AS3100,EN61006-1,EN61006-3
Ant:islanding and IEC Certificates	62109-1,62109-2
Warranty	8 yrs onsite company warranty



  
 2/4/24  
 SHEEMEER.M  
 Assistant Engineer  
 Section-1  
 Electricity Department  
 Thrissur Corporation