

File No.: PDS - 2521/14

Date : 16/11/23

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	:	2,96,254/- (Including Gst)
Supply / Work Description	:	Supply and installation of 27 kw Fronius Eco Inverter and PC Board Eco FI (tested) (scope of work attached with technical specifications)
Tender Security / EMD / Amt.	:	7500/-
Cost of Tender Form	:	600 + 168 (Gst)
Tender Document on Sale	:	
A.S. approved by	:	Council Resolution no. 14/107 dt 14/07/23
T.S approved by	:	Electrical Engineer T CED
Last Date & Time of issuing Tender Form	:	08.12.2023 11am
Last Date & Time of Submitting Tender	:	08.12.2023 2 pm
Date & Time of Opening Tender	:	08.12.2023 4 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.


Assistant Secretary



TENDER SPECIFICATION AND SCOPE OF WORK FOR 27KW INVERTER AND AC BOARD FOR SAME TYPE INVERTER

Scope of Work :-

1. Supply and Installation of 27 KW FRONIUS ECO Inverter
2. Supply and Installation of PC Board ECO FII (tested).

Technical Specification for 27 KW FRUNIVS Inverter

1. INPUT DATA

Number of MPPT trackers	-	1 No.
Max. Input current I_{dc} (max)	-	47.7 A
Max. Array short circuit current	-	80 A
DC input voltage range	-	580 – 1000 V
Number of DC connection	-	6
Max. PV generator out put (P_{dc} max)	-	37.8 KW peak

2. OUTPUT DATA

AC nominal out put (PAC)	-	27KW
Max. out put power	-	27 KVA
AC out put current	-	40.9A/39.1 A
Grid Connection Voltage	-	3 NPE 380 V/220 V Or 3 NPE 400 V/230V (+ 20% / - 30%)
Frequency	-	50 HZ (45 – 65 Hz)
Total Harmonic distortion	-	< 3%
Power Factor	-	0 – 1 Ind./cap.

3. GENERAL DATA

Degree of Protection	-	IP 66
Protection class	-	1
Over Voltage category (DC/AC)	-	2/3
Night time consumption	-	< 1 W
cooling	-	Regulated air
Inverter concept	-	Transformer less

Installation	-	Indoor and outdoor
Ambient Temperature	-	-25 - + 60 °C
Permitted Humidity	-	0 to 100%
DC connection technology	-	6xDC + and 6xDC – Screw terminals 2.5 – 16 mm ²
ac Connection technology	-	5 – pole AC screw terminals 2.5 – 16 mm ²
certificate and compliance with standards	-	Related all standards
 4. EFFICIENCY		
Max. efficiency	-	98.3%
MPP adaption efficiency	-	99.9%
 5. PROTECTION DEVICES		
DC insulation measurement	-	Yes
Over load behavior	-	Op. point shift, power limitation
DC disconnections	-	Yes
Integrated string fuse holders	-	Yes
Reverse polarity protection	-	Yes
RCMU	-	Yes
 6. INTERFACES		
WAN/Ethernet LAN	-	Yes
6 inputs and 4 digital inputs/outfits	-	Interface to ripple control receiver
USB (A socket)	-	Yes
2 x Rs 422/RJ 45 socket	-	Yes
Signaling out put	-	Yes
Data cogger and web server	-	Yes
External input	-	50 meter connections
RS 455	-	Modbns RTU.


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 Thrissur Corporation
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