

ເພື່ອເຈົ້າເປັນ ເພື່ອເປັນ ເປັນ CONSERVATION OF ODESINA UNDER TAKING) CIN- U40102OR2004SGC007553 OFFICE OF THE GENERAL MANAGER, EHT (O&M) CIRCLE, CUTTACK. Madhusudan Nagar, Tulsipur, Cuttack-753008 Tel- (0671)-2300226, E-mail-ehtm.cle.ctc@optcl.co.in

**OPEN TENDER CALL NOTICE NO. 16/CTC/2018-19** 

Sealed tenders are invited by the undersigned from the eligible bidders for "Supply of Microprocessor based Alarm Annunciators of different sizes (Make: Minilec / JVS) along with other accessories at different Grid sub-stations under EHT (O&M) Circle, Cuttack" Experienced Bidders fulfilling the qualifying criteria and possessing Manufacturer / Authorized dealership certificate having valid I.T. Pan Card / GST registration /up to date GST clearance certificate are only

eligible to participate.

The tender specification can be obtained from the office of the undersigned, on payment of dues as mentioned below during office hours from **Dt.13.03.2019 to Dt.03.04.2019**. The tenders shall be received up to **3 P.M**. on **Dt.04.04.2019** and shall be opened at 3.30P.M on the same date in the office of the undersigned. Cost of each Tender Paper: **Rs 4480/-** (in shape of Cash / DD). EMD: **Rs6,500/-** for the tender is to be submitted in shape DD only to be drawn in favour of EHT (O&M), Circle, OPTCL, Cuttack (Payable at Cuttack)

Tenderers are advised to purchase the tender specification from the office of the undersigned before the stipulated date & time. Tenders without EMD will be rejected. The tenders of only those tenderers shall be accepted who have purchased the tender documents from the office of the undersigned well before submission date. The general terms and condition and the details of documents to be submitted with the tender is available in the tender specification. Tenders without required documents shall be rejected out rightly. **In case the bid of any tenderer is successful, then the firm has to give a presentation before the purchase committee regarding the features, usage and configuration of the quoted items.** 

This office will not be responsible for non-receipt / late receipt of tender document due to postal delay. In such cases cost of tender paper will not be refunded. All other terms and conditions of OPTCL purchase & contract regulation will also be applicable to the successful bidders while placing the work/ purchase order. Addendum or Corrigendum if any will be published in the website only.

The undersigned reserves the right to reject any or all the tenders without assigning any reason thereof.

SL	Name of the item	Cost Of Tender	Eligibility Criteria for bidders	
No	Ivalle of the item	specification		
1		Cost of tender paper is	Manufacturer/	
	Supply of Microprocessor based	Rs4480/- (Rs 4000/- + GST	<b>Authorized Dealers</b>	
	Alarm Annunciators of different sizes	@ 12% i.e Rs 480/-)	possessing valid	
	(Make: Minilec / JVS) along with	Bank draft to be drawn in	Dealership Certificate,	
	other accessories at different Grid	favour of EHT (O&M)	GST registration	
	sub-stations under EHT (O&M)	Circle, Cuttack (Payable at	number / clearance	
	Circle, Cuttack.	Cuttack) Cost of tender	certificate and IT PAN	
		document is non-refundable	Card.	

N.B: Subsequent Addendum and Corrigendum if any shall be hosted in OPTCL website only <u>SCHEDULE OF QUANTITY</u>

SI.No	EHT (O&M) Division	Grid Sub-station	Alarm Annunciator (Make: JVS)				220V DC	Blanking
			8 Window	12 Window	20 Window	24 Window	Hooter	Plates
	Dimensions (H x W x D) in mm Facia Window Size (H x W) in mm		144 x	144 x	144 x	144 x	96 x 96	Sizes as per as per requirement
			144 x	216 x	360 x	432 x		
			144	125	125	125		
			23 x 64	23 x 64	23 x 64	23 x 64	NA	
	Panel Cutout (H x W) in mm Configuration:		138 x	138 x	138 x	138 x	92 x 92	
			138	212	356	428		
			4 x 2	4 x 3	4 x 5	4 x 6		
		220/132/33KV						
1	Cuttack	Grid Sub-station, Bidanasi	12	14	7	4	8	25

# 1. In case of items to be quoted are of JVS make

# 2. In case of items to be quoted are of Minilec make

SI.No	EHT (O&M) Division	Grid Sub-station	Alarm Annunciator (Make: Minilec)				220V DC	Blanking
			8 Window	12 Window	20 Window	24 Window	Hooter	Plates
	Dimensions (H x W x D) in mm Facia Window Size (H x W) in mm Panel Cutout (H x W) in mm Configuration:		144 x 144 x 144	144 x 216 x 215	NA	144 x 216 x 215	82 x 96 x 6	As per requirement
			30 x 65	30 x 65		30 x 30	NA	
			138 x 138	138 x 210		138 x 210	92 x 92	
			4 x 2	4 x 3		4 x 6	NA	
1	Cuttack	220/132/33KV Grid Sub-station, Bidanasi	12	14	0	11	8	25

### **TECHNICAL SPECIFICATIONS**

A. ALARM ANNUNCIATOR

- 1. Name of Item : Alarm Annunciator unit
- 2. **Design**: Microprocessor based design
- 3. Enclosure Type: ABS Molded Enclosure
- 4. Architecture: Integral
- 5. Mounting : Panel
- 6. Bezel and Panel Cut-Out Dimensions: Refer Schedule of Quantity
- 7. Window Size :

*Minilec Make*: a) 30 (H) x 65 (W) mm

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b) 30 (H) x 30 (H) mm
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*JVS Make*: 23 (H) x 64 (W) mm

8. Window arrangement: 8 Window  $= 4R \times 2C$ 

12 Window =  $4R \times 3C$ 

20 Window =  $4R \times 5C$  (Not applicable for Minilec)

24 Window =  $4R \times 6C$ 

- 9. Window type: Press fit type
- 10. Window lamp : Super bright high efficiency White LED Window illumination
- 11. Facia Type: Individual Window Lens Front Replaceable
- 12. Auxiliary Power Supply Voltage: 90-270V AC/DC
- 13. Supply Frequency (For AC supply):  $50Hz \pm 3\%$
- 14. Power Supply Unit: SMPS based power supply unit
- 15. Contact Interrogation Voltage: 12V or 24V DC
- 16. Power Consumption per Window: Maximum 1.5 Watts per Window
- 17. Operation temperature and humidity: 0-60°C, 0-95% RH (non condensing)
- 18. **Input signal**: Potential free NO or NC dry input contacts. (NO or NC site Selectable through DIP switches for grouping)
- 19. Isolation: Input contacts as well as push button contacts are to be provided with Optical Isolation.
- 20. **Response time** :  $35 \text{ mSec} \pm 10 \text{ mSec}$
- 21. **Operational sequences**: As per ISA SI8.11B. Site selectable through DIP Switch (Auto reset, manual reset, First-out Sequences)
- 22. Test, Mute, Acknowledge and Reset Command Push Buttons : Are to be provided on the Front panel
- 23. Test, Mute, Acknowledge and Reset External Command Terminals: To be provided on the Backside as well.
- 24. Flash rate: Fast: 60 flashes / minute, Slow: 30 flashes / minute
- 25. **Legend:** Photo Positive legend film sandwiched between Translucent & Transparent acrylic plates. Individual window legends should be replaceable from front.
- 26. Output Contacts: Three (3) nos. of N/O potential free contacts.
- 27. **Power Supply Failure**: In case of Normal Supply Failure, One (1) no. of N/O potential free contacts should be available for connecting external Hooter for audible alarm and for supply fail indication there shall be either dedicated LED on the front panel or Window No 1 should indicate P/S fail.

- 28. Output contacts rating: 5Amps @ 230V AC (Resistive)
- 29. Termination: Through terminal blocks to be provided in the rear side of the unit
- Terminal Connection: 2.5 mm<sup>2</sup> Terminal connectors at the back to connect different inputs from switchyard.
- 31. Protection Class : IP 41 or above
- 32. **Test Certificates**: The bidder has to submit type test reports from any NABL accredited testing and calibration laboratories for the following type tests:

#### A) Functional Tests

i) Functional test of alarm annunciator and its operational sequences during different fault conditions

### **B)** Electrical Tests

- i) 5KV Impulse Withstand as per IS 8686/III/77 or as per Cl. No 6.1.3 of IEC 60255-5 : 2000
- ii) High Voltage 2KV AC between all terminals to body for 1 minute as per IS 3231 as per Cl. No6.1.4 of IEC 60255-5 : 2000
- iii) Tests for satisfactory performance of the device in over voltage / under voltage and short circuit conditions.
- iv) Dry Heat Test as per IEC 68-2-2 1974
- v) Damp Heat Test as per IEC 68-2-3 1969or as per IS9000/7/64
- vi) Surge Withstand test as per Cl. No 7.2 of IEC 61000-4-5 and IEC 60060-1 or as per IS 8688/77

#### C) Mechanical and Environmental Test.

- i) Accelerated ageing test with forced air circulation for 90 hours at 72°C and for 24 hours at 0 °C conforming to IS
- ii) Storage Temperature Test wherein the item inside its package shall be kept inside a box for 24 hours at 70°C during de-energized condition conforming to IS
- iii) Two temperature cyclic test conforming to IS
- iv) Bump test of 100 bumps/axis about 1 bump/sec as per IS9000/7/64 or IEC 1010-1-1990
- 33. The Manufacturer shall be specifying the codes and standards to which they conform in the design, fabrication and performance assessment of the equipments.
- 34. Two set of maintenance manual (one no hard copy & one no soft copy) along with circuit diagram, operating instruction, recommended spare parts list & maintenance tips must be supplied at the time of delivering the item
- 35. Complete catalogue with technical details & circuit diagram must be sent along with the supply.
- 36. In case of successful bid, the firm or manufacturer is required to give a demonstration of the Alarm Annunciator detailing the features, wiring and operation and maintenance procedures at the office of the undersigned at a suitable date.

### B. ELECTRONIC HOOTER

- 1. Name of Item : Electronic Hooter
- 2. Design: Digital
- 3. Enclosure Type: ABS Molded Enclosure
- 4. Mounting : Panel or Wall
- 5. Overall Dimensions: 96 x 96 x82 (H x W x D)
- 6. Panel Cut-Out Dimension: 92 x 92 (H x W)
- 7. Auxiliary Power Supply Voltage: 90-270V AC/DC
- 8. Supply Frequency Range (For AC supply): 48Hz to 63Hz
- 9. Standard Sound Output: 90 to 115db at 30cm
- 10. Tone: Three different selectable tones
- 11. Volume Level Adjustment: Continuous adjustment by means of built in potentiometer
- 12. Power On Indication: 3mm Red LED
- 13. Operating Temperature: 0- 60°C,
- 14. Humidity: 0-95% RH (non condensing)

Sd/-

# GENERAL MANAGER (ELECT.) EHT (O&M) CIRCLE, CUTTACK