

PARADEEP LIGHTHOUSE MASTER LEDGER



1.	<i>Name</i>	Paradeep Lighthouse
2.	<i>Sr. No. (in ALOL)</i>	F 1004.4
3.	<i>Position</i>	Lat. 20 ⁰ 15' 3"N Long. 86 ⁰ 39' 5"E
4.	<i>Elevation of Ground</i>	4 m
5.	<i>Elevation of tower</i>	40.4 m
6.	<i>Character of light</i>	Fl (3) W 30 Sec.
7.	<i>Range in nautical miles</i>	
	i) Luminous	17 NM
	ii) Geographical	17.5 NM
8.	<i>Lighthouse Tower</i>	
	i) Type	Tapering Circular RCC Tower
	ii) Height	40.86 m
	iii) Colour Scheme	Black and White Band
9.	<i>Optical equipment</i>	TRB 220 (Revolving)
	(i) Make	Tideland Signal Corporation, USA.
	(ii) Size	915 mm height & 445 mm Dia.
	(iii) No. of Panels	6
	(iv) Focal Length	110 mm
	(v) RPM	2
	(vi) Duration of Flash	0.75 Sec
	(vii) Illuminant	70 Watt MH Lamp, 230 volts AC
	viii) Divergence	2.40 (Horiz.) & 1.15 (Vert.)
	ix) Luminous Intensity	26928 cd
10.	<i>innovation</i>	Innovation was carried out on August 2013. 100W/12V

Halogen lamp of TRB 220 was replaced with 70W/230V MH Lamp.

11. *Lantern*

- i) Diameter 3.0 m
- ii) Height of glazing 2.0 m
- iii) No. of glass panes 24 Nos.
- iv) No. of Ventilators 6 Nos.

12. *Pedestal*

Local Make

13. *Power supply*

- i) *Mains* 3 Phase, 440V, 50Hz Electric Mains
Supply from Paradeep Port Trust.
- ii) *Solar*

Sl.No.	Types of Solar Power	Capacity	No. of Panels	Inverter	Remarks
1	OFF GRID	5 kWp	20 (each 250W 24V)	5KVA, Make Genus	

iii) *Standby*

Gensets (02 Nos.)

A. *Details of Engine*

Sl.No.	Engine Sl. No.	Make	BHP	No. of Cylinder	RPM	Cooling	Date of Installation
1.	0200113	Kirloskar	32	03	1500	Air Cooling	13.8.2002
2	0100243	Kirloskar	32	03	1500	Air Cooling	09.01.2003

B. *Details of Alternator*

Sl. No.	Alternator Sl. No.	Make	KVA	Voltage	Current (Amp)	Freq. (Hz)	Phase	RPM
1	0200113	Kirloskar	20	230	83	50Hz	Single	1500
2	0100243	Kirloskar	20	230	83	50Hz	Single	1500

14. *Other Equipments*

i) *Battery Charger* 01 No. inbuilt Battery Charger in AMF Panel.

ii) *Stabilizer*

Sr No	Input voltage	Output Voltage	KVA	Make	Freq.	Phase	Date of Installation
1	120V-240V AC	230 V AC	15	Delta Electronic	50Hz	Single	17.01 2009

iii) *Inverter*

Sr. No.	Particulars	Qty	Date of Installation	Purpose
1	1500 VA, 24V DC (input), 230V AC (output), Sukam make	1 No.	12.04.2014	For Light beacon

15. Remote monitoring and control system

All equipment's are remotely monitored by MCS at Deep Bhavan, Kolkata

- i) Main Panel 1 No. installed at power house.
- ii) Remote Panel 1 No. installed at service room of the Lighthouse tower.
- iii) UPS 1 No. 1 KVA, APC make placed inside main Panel.
- iv) Communication VSAT
- iv) VSAT 1 No. installed on ground near power house.
- v) Modem 1 No. placed inside main Panel.

16. NAIS

- x) AIS Base station 02 Nos. Saab make, installed at Service room (NAIS Rack).
- xi) Modem 01 No. Datum make, installed at Service room (NAIS Rack).
- xii) Router 01 No. Cisco make, installed at Service room (NAIS Rack).
- xiii) Switch 01 No. Cisco make, installed at Service room (NAIS Rack).
- xiv) GPS antenna 02 Nos. installed at LH tower railing.
- xv) VHF antenna 02 Nos. installed at LH tower railing.
- xvi) UPS 01 No. 1KVA, APC make installed at Service room (NAIS Rack)
- xvii) Communication Lease Line (BSNL).
- xviii) Date of commissioning February 2012

17. DGPS

- i) Make Leica (USA)
- ii) Transmitter NAUTEL (USA)
- iii) Frequency 290 KHz
- iv) Power Output 500 W
- v) Reference Station I, ID 440,
- vi) Reference Station II, ID 441,
- vii) Beacon ID 120
- viii) Integrity Monitor I&II GR 30., LEICA-02 Nos.
- ix) Personal Computer Make — HP Compaq with Key Board & Mouse
With 01 No Printer Make — Epson
- x) UPS: Capacity — 10 KVA for Transmitter, Make-APC, 03 KVA for DGPS UPS-1
Capacity — 1 KVA for DGPS Rack, Make-APC, 01 No. KVA for Printer.
- xi) Batteries 16 Nos. SMF (42AH/12V), EXIDE make for Transmitter.
06 Nos. SMF (12AH/12V), EXIDE make for DGPS Rack.
- xii) Date of Installation **19.12.2019**

18. Fire Extinguisher

Sl. No.	Type	Capacity	Qty	Installed Place
1	DCP	5 Kg	3 Nos.	1 No. at service room and 2 Nos. at Power House.
2	CO2	9 ltr.	2 Nos.	Both placed at Office room.
3	ABC	5 Kg	1 No.	Placed at DGPS room.
4	Fire Buckets	10 Litres	4 Nos.	Placed outside power house.

19. *Water Supply*

Local port water is provided twice in a day for 30 minutes. Bore well for gardening purpose only.

20. *Land*

i) Area	3 Acre
ii) Demarcation	Compound Wall.
iii) No. of fruit trees	60
iv) No. of non-fruit bearing trees	12

21. *Building*

- 19 1No. Office cum power house.
- 20 1No. IQ
- 21 1 No. AE (E) Qtr.
- 22 Twin Qtr for SRT & NA-I.
- 23 1 No. Qtr for NA-II.
- 24 Twin Qtrs for LHA.
- 25 01 No. Coil Hut.

22. *Contact details*

i. LH Land line No.	06722-222332
ii. Office E-Mail	assistantengineerpdh@gmail.com
iii. Postal Address	Paradeep Lighthouse & DGPS Station, PO — Paradeep, Dist. Jagatsingpur, Odisha — 754 142.

23. *Mode of Approach*

The station is well connected by all weather road. The nearest Railway Station is Paradeep which is 10 Km from Paradeep Lighthouse. Nearest Airport is Bhubaneswar which is approx. 120 km from Paradeep LH..

24. *Facilities Available*

Post Office, Primary Health Center, Police Station and High School all are within 10 KM from Sagar Island Lighthouse.

