

# SAGAR ISLAND LIGHTHOUSE MASTER LEDGER



1.	<i>Name</i>	Saugor Island Lighthouse & DGPS Station
2.	<i>Sr. No. (A.L.O.L.)</i>	F 1028
3.	<i>Position</i>	Lat. 21 <sup>0</sup> 39.4'N Long. 88 <sup>0</sup> 02.9'E
4.	<i>Elevation of ground</i>	2 m
5.	<i>Elevation of tower</i>	26 m
6.	<i>Character of light</i>	FL (W) in every 3 Sec
7.	<i>Range in nautical miles</i>	
	i) Luminous	25 NM
	ii) Geographical	17 NM
8.	<i>Lighthouse Tower</i>	
	i) Type	Circular Cast Iron Tower
	ii) Height	24 m
	iii) Color Scheme	Red and White Band
9.	<i>Optical equipment</i>	
	(i) Make	Chance Brothers, Birmingham, England
	(ii) Size	4 <sup>th</sup> order (focal length 250mm)
	(iii) No. of Panels	8
	(iv) Focal Length	250 mm
	(v) RPM	7
	(vi) Duration of Flash	0.3 Sec
	(vii) Illuminant	400W MH Lamp
	(viii) Divergence	4.35 (Horiz.) & 2.10 (Vert.)
	(ix) Luminous intensity	1,32,500 cd
10.	<i>Innovation</i>	No innovation has been carried out since take over from Kolkata Port Trust on 2011.

11. *Lantern*
- i) Diameter 3m
  - ii) Height of glazing 1.93 m
  - iii) No. of glass panes 80 Nos.
  - iv) Ventilators 6 Nos.
12. *Pedestral* Mercury float (24 Kg in use)
13. *Power Supply*
- i) *Mains* 3 Phase, 440 V, 50Hz AC Mains supply from WBSEDCL
  - ii) *Solar*

SI.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**

SI.No.	Engine SI. No.	Make	BHP	No. of Cylinder	RPM	Cooling	Date of Installation
1.	3.2107/1120683	Kirloskar	32	03	1500	Air Cooling	28.11.2016
2	03.8901/1620602	Kirloskar	32	03	1500	Air Cooling	06.07.2012

**B) Details of Alternator**

Sl. No.	Alternator SI. No.	Make	KVA	Voltage	Current (Amp)	Freq. (Hz)	Phase	RPM
1	CS1D011A1 19980	Kirloskar	20	230	83	50Hz	Single	1500
2	CS 1 D016C23382-H	Kirloskar	20	230	83	50Hz	Single	1500

**14. Other Equipments**

i) *Battery Charger* NIL

ii) *Stabilizer*

Sr No	Input voltage	Output Voltage	KVA	Make	Freq.	Phase	Date of Installation
1	170-270VAC	230VAC	15	ServoMax	50Hz	Single	27.10.2017
2	170-270VAC	230VAC	15	ServoMax	50Hz	Single	27.10.2017
3	170-270VAC	230VAC	15	ServoMax	50Hz	Single	27.10.2017

iii) *Inverter*

Sr. No.	Particulars	Qty	Date of Installation	Purpose
1	1600 VA, 24V DC (input), 230V AC (output), Sukam make	1 No.	24.12.2016	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 base 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 roof top of power house.
- v) Modem 1 No. placed inside main Panel.

**16. NAIS**

- i) AIS Base station 02 Nos. Saab make, installed at DGPS room (NAIS Rack).
- ii) Modem 01 No. Datum make, installed at DGPS room (NAIS Rack).
- iii) Router 01 No. Cisco make, installed at DGPS room (NAIS Rack).
- iv) Switch 01 No. Cisco make, installed at DGPS room (NAIS Rack).
- v) GPS antenna 02 Nos. installed at roof top of IQ.
- vi) VHF antenna 02 Nos. installed at LH tower railing.
- vii) UPS 02 Nos. 1KVA, APC make installed at DGPS room (NAIS Rack)
- viii) Communication VSAT installed at rooftop of IQ.
- ix) Date of commissioning February 2012

**17. DGPS**

- i) Transmitter Nautel (Canada)
- ii) Frequency 318 Hz
- iii) Power Output 500 W
- iv) Reference Station I, ID 434
- v) Reference Station II, ID 435
- vi) Integrity Monitor I&II GR 30 LEICA
- vii) Beacon ID 117
- viii) Personal Computer Make — Dell with Key Board & Mouse  
With 01 No. Laser Printer Make — HP
- ix) UPS Capacity — 10 KVA for Transmitter & ATU, Make-APC,  
Capacity — 03 KVA for DGPS Rack, Make-APC,  
Capacity — 01 KVA for Printer, Make-APC,
- x) Batteries 16 Nos. SMF (42AH/12V), EXIDE make for 10KVA UPS.  
06 Nos. SMF (42AH/12V), EXIDE make for 3KVA UPS.
- xi) Date of Installation 27.11.2017

### 17. *Fire Extinguisher*

Sl. No.	Type	Capacity	Qty	Installed Place
1	DCP	5 Kg	4 Nos.	1 No. at service room, 1 No. at power house and 2 Nos. at store room.
2	CO2	9 ltr.	2 Nos.	1 No. at power house & 1 No. at store room.
3	CO2	6.5 ltr.	2 Nos.	Both at DGPS room
4	ABC	5 Kg	1 No.	Placed at power house
5	Fire Buckets	10 Litres	4 Nos.	Placed inside power house

### 18. *Water Supply*

2 HP motor (Crompton make) use to pump water from bore well to overhead tanks (04 Nos.) placed at roof top of staff quarters. 2 HP motor were supplied on 2.03.2016

### 19. *Land*

- i) Area 6 Acre
- ii) Demarcation Compound Wall.
- iii) No. of fruit trees 10
- iv) No. of non-fruit bearing trees 35

### 20. *Building*

- i. 1 No. Office cum power house cum IQ.
- ii. 1 No. building which consist of AE (E) & NA-II Quarters (total 6 quarters).
- iii. 1 No. twin LHA Qtr.
- iv. 1 No. pump house.
- v. 1 No. Coil Hut.

### 21. *Contact details*

- i. Incharge Mobile No. 9601899925
- ii. Office E-Mail saugardgps@gmail.com
- iii. Postal Address Sagar Island Lighthouse & DGPS Station,  
PO— Beguakhali, Via Rudranagar, Sagar,  
Dist. South 24 Parganas, West Bengal— 743 373.

### 22. *Mode of Approach*

To visit the station one has to cross the Hoogly river through Vessels from Lot No.8 Ghat to Kachuberia Ghat. Distance from Kachuberia Ghat to Lighthouse is approx. 32 Km. Nearest Railway Station is Kakdwip which is approx. 44 Km from Lighthouse.

### 23. *Facilities Available*

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