

# Santapalli Lighthouse

Estd.1840

## MASTER LEDGER

1. **Name** : SANTAPALLI LIGHTHOUSE
2. **Sr.No.**  
**(as per A.L.O.L)** : 0980
3. **Position** : Lat: 18<sup>0</sup> 03.9' N  
Long: 83<sup>0</sup> 38.4' E
4. **Elevation** : 43 Mtr
5. **Characteristic** : FL (2) White, every 10 Seconds  
**(Fl 0.2 ec2.3 Fl0.2 ec7)**
6. **Range in nautical miles**
  - i) Luminous : 23 NM
  - ii) Geographical : 18 NM
7. **Lighthouse Tower**
  - i) Type : Circular masonry Tower
  - ii) Height : 22 Mtr
  - iii) Colour Scheme : Black and White bands
8. **Optical Equipment**
  - a) i) Make : M/s Chance Brothers
  - ii) Size : 500 mm 3<sup>rd</sup> Order Large Revolving
  - iii) Focal distance : 500 mm
  - iv) No. of Panels : 2 Nos.
  - v) Area of dioptric portion : Total corrected area 11080 sq cm.
  - vi) Area of catadioptric portion : Total corrected area 11080 sq cm
  - vii) Divergence  
Main : Horizontal. 6<sup>0</sup> 45 6', Vertical 6<sup>0</sup> 18.6'



- |                                    |   |  |
|------------------------------------|---|--|
| Standby                            | : | NIL  |
| Emergency                          | : | NIL  |
| viii) Duration of flash            |   |  |
| Main/ Standby                      | : | 0.20 seconds   |
| Emergency                          | : | ---  |
|                                    |   |  |
| b) <b>Pedestal</b>                 | : | Mercury Float 91 kg. in use.<br>Cast iron Pedestal   |
|                                    |   |  |
| c) <b>Rotation Device</b>          | : | Twin Stepper motor Direct Drive system.<br>i) Stepper motor :2 No 40Kg-cm (unique make)<br>ii) Controller: 2No 40Kg-Cm (unique make) |
| d) <b>Rotation Speed</b>           | : | 6 RPM  |
| e) <b>Illuminant</b>               |   |  |
| i) Main/Service                    | : | 150 W Metal Halide Lamp- 3 Nos. (Cluster)  |
| ii) Standby                        | : | Nil  |
| iii) Emergency                     | : | Nil  |
| f) <b>Effective Beam Intensity</b> |   |  |
| i) Main/Service                    | : | 9,39,600 cds.  |
| ii) Standby                        | : | N/A  |
| iii) Emergency                     | : | N/A  |
| 9. <b>Lantern</b>                  |   |  |
| i) Diameter                        | : | 3.65 Mtr   |
| ii) Height of glazing              | : | 1 Mtr  |
| iii) No. of panes                  | : | 32 Nos.<br>(12 panes blanked on Landside)  |
| iv) Ventilators                    | : | 12 Nos.  |
|                                    |   |  |
| 10. <b>Main light UPS</b>          | : | 4 Nos. in use. 0No. spare  |
| Make                               | : | UTL  |
| Capacity                           | : | 800 VA   |
| Input                              | : | 12V DC   |

Output : 230V AC  
Model Number : UTL combo

#### 11. Energy Source

A) APEPDCL Mains : 3phase 440V 50HZ AC  
B) Green Energy : 3KW off grid solar power plant for main light.  
i) Solar panels : 12 No 24V/250W( Vikram make)  
ii) Battery Bank : 12 No 12V /150Ah (Exide SMF)  
iii) PCU : HBL Make 3KVA /48V PCU

#### 12. Diesel Engine Generators

Make : Kirloskar  
Model : KG 15AS4 (Canopy)  
Rating : 15KVA  
Frequency : 50 HZ  
Phase : single phase  
RPM : 1500  
Alternator Frame no : KG184B  
Engine Sr no : 02.2129/1320143

#### 13. Automatic Voltage Stabilizers : 1 No.

Make : supra- hitech  
Model : SH-390  
Capacity : 09 KVA, 3phase.  
Input : 330-470V  
Output : 400 ± 1% V

#### 14. AMF Panel

Capacity : 15 KVA, 3 phase 25A.  
Make : Elect India  
Model : EMF15KM3G1-ICFTDM02

15. NAIS Equipment

- i) Make : M/s SAAB
- ii) AIS R40 Base Station : S/No.5322
- iii) AIS R40 Base Station : S/No 5278  
(Connected with Cisco switch and PSM-500L Satilite modem.)
- iv) V- SAT Dish Size : 2.4 Mtr.
- v) VHF Antenna : 2 Nos.
- vi) GPS Antenna : 2 Nos.
- vii) Date of Commissioning : 20/12/2011

16. Automation of Lighthouse.

- i) Make : M/s Recktronic Devices & Systems, Pune.
- ii) RDS Panel : 1No in power house.( s.no.1761)
- iii) RDS Panel : 1No Service room.( s.no.1740)
- iv) V-SAT Dish Size : 1.2 Mtr
- v) Date of commissioning : 21/02/2013

17. Street Lights : 6 Nos. R.C.C Poles with 25W LED Light,  
2 Nos. Gate lights

18. Firefighting equipment

Fire Extinguishers

- i) D.C.P. type (3.2kg Capacity) : 1 No.
- ii) Foam type (4.5 litres capacity) : 2 Nos.
- iii) Fire Buckets : 4 Nos.

19. Communication Facility : Mobile No. 9367411378 NA-II  
e-mail :- santapalleh@gmail.com

20. Water Supply : i) Bore well with Submersible pump 1HP, single phase (Kirloskar)

ii) Sintex Tank - 4 Nos.

Capacity : 1KL lit. 2nos. 0.5KL-2nos

21. Land

i) Area : 11.56 Acres

ii) Demarcation : Masonry Compound wall

iii) No. of fruit trees : 350 Nos.

iv) No. of non fruit bearing Trees : 35 Nos.

22. Buildings : Inspection quarters, NA-I quarter, NA-II quarter, Power house, LHA quarter, LHS quarter.

23. Staff : i) NA-I - 1 No, NA-II - 1 No, LHS - 1 No,

24. Mode of approach : By road from Visakhapatnam to Pusapati Raga approx. 60km, then by road Santapalli 15 km then by walk 1km to lighthouse.

25. Facilities available : a) Post Office within 3 km (Chintapalli)  
b) Govt. Hospital within 20 km (Pusapati Raga)  
c) Govt. School within 7 km (Govindapuram)  
d) Nationalized Bank with 35 km (Vizayanagaram)

26. Postal Address : The Navigational Assistant Gr-I,  
Santapalli Lighthouse,  
Chintapalli post, Via. Pusapati Raga,  
Dist. Vizayanagaram  
Andhra Pradesh, Pin: 535 204.

27. Cost Details

i) Construction : Not available

ii) Cost of equipment : Not available

28. Year of first Light Commissioned : 1840

29. Date of Commissioning : 1903

30. Subsequent Innovation : 1849, 1903, 1995, 2004