

# Pentakota Lighthouse

Estd.1957

## VISAKHAPATNAM DIRECTORATE MASTER LEDGER

1. **Name** : PENTAKOTA LIGHTHOUSE
2. **Sr.No.**  
**(as per A.L.O.L)** : 0966
3. **Position** : Lat: 17<sup>0</sup> 18.0' N  
Long: 82<sup>0</sup> 37.0' E
4. **Elevation** : 18 Mtr
5. **Characteristic** : Fl. W 15 Sec.  
**(Fl. 1.5 +, ec. 13.5= 15 sec.)**
6. **Range in nautical miles**
  - i) Luminous : 15 M
  - ii) Geographical : 10 NM
7. **Lighthouse Tower**
  - i) Type : Square Masonry
  - ii) Height : 17.6 Mtr
  - iii) Colour : Black & White bands  
Scheme
8. **Optical Equipment**
  - a)
    - i) Make : B.B.T
    - ii) Size : 150 mm (6<sup>th</sup> order) revolving
    - iii) Focal distance : 150 NM
    - iv) No. of Panels : 4 Nos.
    - v) Area of dioptric portion : -
    - vi) Area of catadioptric portion : -
    - vii) Divergence



Main : Horizontal 7° 30', Vertical 5° 40'

Standby : NIL

Emergency : NIL

viii) Duration of flash

Main/ Standby : 1.5 seconds

Emergency : ---

b) **Pedestal** : Mercury Float (14.7 Kg in use)

Twin stepper motor Direct Drive system.

c) **Rotation Device** : i) Stepper motor : 2 No 10Kg-cm (unique make)  
ii) Controller: 2No 10Kg-Cm (unique make)

d) **Rotation Speed** : 1 RPM

e) **Illuminant**

i) Main/Service : 150 W Metal halide lamps

ii) Standby : 150W MH lamp.

iii) Emergency : Nil

f) **Effective Beam Intensity**

i) Main/Service : 4,38,480 cds.

ii) Standby : Nil

iii) Emergency : Nil

9. **Lantern**

i) Diameter : 1.0Mtr

ii) Height of glazing : 0.8Mtr

iii) No. of panes : 6 Nos.

iv) Ventilators : 7 Nos.

10. **Energy Source**

A) APEPDCL Mains : single phase AC 230V

B) Green Energy : 1.36KW off grid solar power plant for main light.

- i) Solar panel : 8 Nos. 24V/170W (TATA B.P make)
- ii) Battery Bank : 11 o 2V /500Ah (Exide Tubular)
- iii) PCU : TATA B.P make 1 KVA /24V
- C) Green Energy : 0.34 KW off grid solar power plant for NAIS
  - i) Solar panel : 2 Nos. 24V/170W( TATA B.P make)
  - ii) Battery Bank : 4 Nos. 12V /150Ah (Exide SMF)
  - iii) PCU : Hykon make 2 KVA /24V

**11. Diesel Engine Generator**

- Make : Kirloskar
- Model : KG15AS4 (Canopy)
- Rating : 15KVA
- Frequency : 50 HZ
- Phase : single phase
- RPM : 1500

**12. Automatic Voltage Stabilizers** : 1 No.

- Make : Supra- hitech
- Model : SH-1100
- Capacity : 10 KVA
- Input : 170-270 V
- Output : 230

**13. AMF Panel**

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

**14. NAIS Equipment**

- i) Make : M/s SAAB
- ii) AIS R40 Base Station : S/No.5318

- iii) AIS R40 Base Station : S/No 5330  
(Connected with Cisco switch and PSM-500LSatellite modem.)
- iv) V- SAT Dish Size : 2.4Mtr. dia
- v) VHF Antenna : 1 Nos.
- vi) GPS Antenna : 2 Nos.
- vii) Date of Commissioning : 20/12/2011

15. Automation of Lighthouse.

- i) Make : M/s Recktronic Devices & Systems, Pune.
- ii) RDS Panel : 1No. in power house.( s.no.102946427)
- iii) RDS Panel : 1No Service room. ( s.no102940389)
- iv) V-SAT Dish Size : 1.2Mtr dia
- v) Date of commissioning : 21/02/2013

16. Street Lights : 9 Nos. GI Pole with 25W LED Light,  
2 Nos. Gate lights fittings

17. Battery Charger : 01 No.  
Make : A E  
Capacity : 60 Amps  
Input : 230 V  
Output : 0-30

18. Firefighting equipment

Fire Extinguishers

- i) D.C.P. type (3.2kg Capacity) : 1 No.
- ii) Foam type (9 litres capacity) : 1 No.

- iii) Fire Buckets : Nil
19. Communication Facility : NA-II Mobile No:- 9640783121  
E-mail : [pentakotalighthouse@gmail.com](mailto:pentakotalighthouse@gmail.com)
20. Water Supply : Open well & 1 No. Tube Well
21. Land
- i) Area : 0.97 cers (approx.)
- ii) Demarcation : Masonry wall
22. Buildings : Single unit of Inspection Quarter, store cum L.H.A  
Quarter power house.
23. Staff : i) N.A-II-01no, Ph.no.9640783121, N.A-III –  
01NO.(Out sourcing) and Housekeeping-  
01no.(Out sourcing)
24. Mode of approach : Up to Tuni by Rail then 23 km. by road.
25. Facilities available : a) Post Office within 1 km (Pentakota)  
b) Govt. Hospital within 18 km (Payakaraopeta)  
c) Govt. School within 18 km (Payakaraopeta)  
d) Nationalized Bank with 18 km (Payakaraopeta)
26. Postal Address : The Navigational Assistant Gr-II, Pentakota  
Lighthouse, P.O. Pentakota, Via. Satyavaram,  
District- Vizag. Andhra Pradesh, Pin: 535 204.
27. Cost Details
- i) Construction : Rs. 77,000.00
- ii) Cost of equipment : 1,41,000.00

- 28. Year of first Light Commissioned : 1957
- 29. Date of Commissioning : 01-06-1957
- 30. Subsequent Innovation : 1991, 1997, 2002