

Machilipatnam Lighthouse Estd.1858

MASTER LEDGER

1. Name : MACHILIPATNAM LIGHTHOUSE
2. Sr.No. (In A.L.O.L) : 0955
3. Position : Lat:16° 14' 48" N
Long: 81° 14' 00" E
4. Elevation : 50.56 Mts. above MSL
5. Characteristic :Gr. FL(3) W.20 Seconds
F1 0.5, EC 2.0,F2 0.5, EC 2.0, F3
0.5,EC 14.5 sec.)
6. Range in nautical miles
i) Luminous : 20 NM
ii) Geographical : 16.5 NM
7. Lighthouse Tower
i) Type : Circular R.C.C.Tower
ii) Height : 50 Mtr.
iii) Colour Scheme : Black and White bands
8. Optical Equipment
- a) i) Make : MBR 300 MSM
ii) Date of installation : 01 -07-2010
iii) Size : Focal lenth 105 mm,150 W/220 V AC MH Lamp
iv) No.of Panels : 3 Nos.
v) Divergence Main : Horizontal : 9⁰, Vertical : 9⁰
vi) Duration of flashMain : 0.5 seconds
- b) Rotation Speed : 3 RPM
- c) Illuminant
i) Main/Service : 150 Watts Metal Halide Lamps
ii) Date of installation : 03 -07-2015
- D) Effective Beam Intensity
i) Main/Service : 1,66,000cds
9. Lantern
i) Diameter : 3.0Mtrs
ii) Height of glazing : 2.0Mtrs
iii) No. of panels : 12 Nos. (2 panes blanked) Reglazing: 12-08-1992



- iv) Ventilators : 11 Nos. (8 Nos. hit and miss Ventilators) (3 No. Exhaust Fans)
10. Main-Light UPS : 1 No.
- i) Make : UTL
- ii) Capacity : 800 VA
- iii) Input : 12 V DC
- iv) Output : 230V AC
- v) Model Number : UTL Combo
11. Energy Source
- A) APCPDCL
- i) Mains : 3 phase 440 V, 50 Hz
- B) Green Energy : 0.48 KW off grid solar system for Main-light
- i) Solar Panels : 6 Nos. 12V/80 W Panels (TATA BP Make)
- ii) Battery Bank : Nos. 2V/900 AH Battery Bank (TATA BP Make)
- iii) PCU : UTL Make 1 KVA 12 V UPS
12. Battery Charger : 1 No.
- i) Make : Blue Line
- ii) Capacity : 36 Amps
- iii) Input : 220V-250V
- iv) Output : 18 V DC
13. Details of Diesel Engine Generators
- i) Make : Kirloskar
- ii) Model No. : KG12AS4(Canopy)
- iii) Rating : 15 KVA
- iv) Frequency : 50 Hz
- v) Phase : Single Phase
- vi) RPM : 1500
- vii) Cooling : Air Cooling
14. Diesel Engine Alternator
- i) Make : Kirloskar
- ii) Capacity : 15 KVA
- iii) Voltage : 240 V
- iv) Frequency : 50 Hz
- v) Phase : Single Phase
- vi) RPM : 1500

15.Servo Stabilizer : 1 No.
i) Make. : Supra Hi-tech Electro Equipments Pvt Ltd.
ii) Model. : SH -3120W
iii) Capacity : 12KVA
iv) Input. : 200V - 240V
v) Output. : 230V

16.AMF Panel
i) Make : Elect. India
ii) Model : EMF 15KM3G1-ICFCDM02
iii) Capacity : 15 KVA

17. NAIS Equipment
i) Make : M/S SAAB
AIS R40 Base Station : S1 No.5320
AIS R40 Base Station : S1 No.5231
(Connected with Cisco Switch and PSM-500L Satellite Modem)
V-SAT Dish Size : 2.4Mtr. Dia
VHF Antenna : 2 Nos.
GPS Antenna : 2 Nos.
Date of Commissioning : 01-05-2012
Back up for NAIS
i) Numaric make 1 KVA UPS with 2 Nos. 150 Ah Battery(installation on Dt:03.02.2013)

1. Automation of Lighthouse.
Make : M/S Recktronics Devices & Systems, Pune.
RDS Panel : 1No. in power House.(S.No.1608)
RDS Panel : 1No. in Service Room.(S.No.1603)
VSAT Antenna : 1.2Mtr. Dia
Date of Commissioning : 18-02-2013

19. Street Light : 11 Nos. G.I. poles with 25W LEW fittings, 2 Nos. Gate Lights

20. Firefighting Equipment
Fire Extinguishers
i) D.C.P. Type(3.2 kg Capacity): 1No
ii) Foam Type : 2 Nos.(9 Liters Capacity)
iii)Fire Buckets : 4 Nos.

21.Communication Facility : BSNL Telephone No.08672-242233 with Broad band internet. NA-I Mobile No.E-mail :machilipatnam-vizag@dgl.nic.in

22. Water Supply : Open well is provided with electric pump set of 1HP with over head tank and supply to Buildings. (Pump set 'Texmo' Make Mono block type)
23. Land
- i) Area : 1.210 Hectares
 - ii) Demarcations : Compound wall
 - iii) No. of fruit trees : 21 Nos.
 - iv) No. of non fruit nearing trees : 84 Nos.
24. Buildings : Lighthouse tower, Powerhouse, one unit of Inspection quarter, one unit of NA-I quarter, one twin unit of NA-II quarter and one twin unit of LHA and LHS quarter, one unit of Jeep Driver quarter.
25. Staff
- i) NA-I-1 No.
 - ii) NA-II-1 No.
 - iii) NA-III-1 No.
 - iv) LHA-1 No.
 - v) Field Assistant -3 Nos(Outsource)
 - vi) Security guard-3 Nos(Outsource)
26. Mode of approach : By Rail up to Machilipatnam and then by Auto to Lighthouse for about 10 Km or by S.T. Bus up to Machilipatnam and then by auto up to Lighthouse.
27. Facilities Available
- a) Post office within 4 Km (tallapalem P.O)
 - b) Govt. Hospital within 15 Km (Machilipatnam)
 - c) Govt. School within 6 Km (Gokavaram)
 - d) Nationalized Bank within 15 Km (Canara Bank, Machilipatnam)
28. Postal Address : The Navigational Assistant Gr-I,
Machilipatnam Lighthouse, Beach Road,
Tallapalem Post, Via
Chilakalapudi, Dist. Krishna, Andhra Pradesh, PIN-521002.
29. Cost Details
- i) Construction : Rs.26,86,434/-
 - ii) Cost of Equipment : Rs.12,97,005/-
30. Year First Light Commissioned : 1858
31. Commissioning of Present Lighthouse : 15-12-1984
32. Subsequent Innovation : 1903, 1930, 1939, 1984, 1996, 2015