

मास्टर लेज़र/MASTER LEDGER

नागपट्टिनम दीपस्तंभ और डीजीपीएस स्टेशन/ NAGAPATTINAM LIGHTHOUSE AND DGPS STATION							
क्रम संख्या/ Sr.No	नाम /Name		विवरण / Discription				
1.	नाम /Name	:	नागपट्टिनम दीपस्तंभ और डीजीपीएस स्टेशन/NAGAPATTINAM LIGHTHOUSE AND DGPS STATION				
2.	क्रम संख्या/SL No: (As Per A.L.O.L.)	:	F 0914				
3.	स्थान/Position	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">Lat</td> <td style="width: 90%; text-align: center;">10° 45' 9" N</td> </tr> <tr> <td style="text-align: center;">Lon</td> <td style="text-align: center;">79° 51' 1" E</td> </tr> </table>	Lat	10° 45' 9" N	Lon	79° 51' 1" E
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Lon	79° 51' 1" E						
4.	ऊंचाई / Elevation	:	50 Meters above MSL				
5.	अभिलक्षण / Characteristic	:	Flash (2) White in every 20 Seconds (0.5+ <u>2.0</u>)+0.5+ <u>17.0</u>)				
6.	नॉटिकल माइल मे दूरी Range in miles	:					
	(i) प्रकाशमान / Luminous	:	18 NM				
	(ii) भौगोलिक /Geographical	:	19 NM				
7.	दीपस्तंभ टावर / L.H.Tower	:					
	(i) प्रकार /Type	:	Circular stone Masonry Tower				
	(ii) उंचाई /Height	:	48 Meters				
	(iii) रंग योजना / Colour Scheme	:	Black & White Band				
8.	ऑप्टिकल उपकरण Optical equipment	:	MBR-300				
(a)	Optic/ type	:	Rotating Beacon				
	(i) Make	:	MSM				
	(ii) Size	:	140 mm				
	(iii) No of panels	:	2				
	(iv) Area of Di optic portion	:	NA				
	(v) Area of Catadioptric portion	:	NA				

	(vi)	Total Corrected Area		NA		
	(vii)	Divergence	:	NA		
		Horizontal	:	2.4°		
		Vertical	:	4.0°		
(b)		Pedestal	:	NA		
(c)		Rotation device	:	20kg/cm, Stepper motor controller, make: Unique Systems & Controls Pvt Ltd 12V/DC Stepper motor		
(d)		RPM	:	1.5		
(e)		Illuminant:	:	150W MH lamp (CDMT)		
		Cluster/ Single ended		Single Ended		
		No. of lamps & Make		1 no. & Philips		
		Wattage		150W		
		Ballast Details		Electronic Ballast		
		No. of Ballast & Make		1 & Kiwik Lite		
		Wattage of Ballast		150W		
(f)		प्रभावी बीम तीव्रता / Effective beam intensity	:	1,66,000 candelas		
9.		लैंटर्न / Lantern				
	(i)	Diameter	:	4.42 Mts		
	(ii)	Height of glazing	:	2.438 Mts		
	(iii)	No of panels	:	48 (Partially ¼ area Blocked on land side)		
	(iv)	Ventilators	:	15 nos		
10.		ऊर्जा के साधन / Source of energy				
	(i)	Local Mains	:	3Ø, 440V, 50Hz, CL:30KW with solar net metering		
	(ii)	Emergency	:	140 mm Drum Optic Flasher (Halogen Lamp 12V/ DC/100 Watts)		
	(iii)	Stand By	:	Diesel Generator set - 2 nos (20KVA)		
11.		इंवर्टर / Inverter /UPS				
Sr No	Make	Date of Installation	Input Volts DC	Output Volts	Capacity	Used for
1	"UTL COMBO" Make	20.4.2011	12 V	230V	800 VA	Main Lamp
2	Hykon	6-7-2006	48 V	230V	3 KVA	DGPS
3.	Hykon	6-7-2006	120 V	230V	5 KVA	Transmitters
4.						

12.	No of Diesel Generator set	:	2 nos (Date of Installation:27-4-2013)				
Details of Diesel engines: 20KVA / 32HP							
Sr. No	Engine No	Make	Type	No. of cylinders	HP	RPM	Cooling
A	03.2145/1320285	HA394 Kirloskar Green	Diesel	3	32	1500	Air Cooling
B	03.2145/1320303	HA394 Kirloskar Green	Diesel	3	32	1500	Air Cooling
Details of Alternator							
Sr No	Serial No	Make	KVA	Volts	Hz	Phase	RPM
A	CSID013A21941-H	Kirloskar	20	230V	50Hz	Single	1500
B	CSID013A21943-H	Kirloskar	20	230V	50Hz	Single	1500
13.	स्वचालित वोल्टेज स्टेबलाइजर Automatic Voltage Stabilizers/ AMF Panel						
	Make and Sl.no	Input /EB	Input/DG	Capacity	With or without Distribution System		
	ELECT & Model No: MSC- EMF20K3-2G1- Es0010110	440V 3Ø	240V 1Ø	20 KVA	With distribution system		
Automatic voltage stabilizer							
Sr No	Make	Input	Output	Capacity	Qty		
A	ITL	170-240V, 1Ø	230V, 1Ø	12.5 KVA	7nos		
14.	बैटरी / Batteries						
Sr No.	Where used	Date of Installation	Qty in Nos.	Type	Make	Volts	Amp-Hr
(a)	For starting of engines	13-8-2018	2nos	Lead Acid Battery	Exide Express	12V	150AH
(b)	For RACON	21-12-2018	1no	SMF	Exide Power safe	12V	150AH
(c)	UPS (Main lamp)	14-8-2018	2nos	SMF	Exide Power safe	12V	150AH
(d)	UPS - 5 KVA & 3 KVA (Transmitter & DGPS)	26-11-2019	10nos+ 4nos	SMF	Exide Power safe	12V	64AH
15.	बैटरी चार्जर/ Battery charger						
Sr No.	Make	Volts		Capacity	Qty in Nos.		
(a)	AE	Input-230V AC & Output- 0-30V DC		40 Amps	1no		
(b)	Manually assembled one	Input-230V AC & Output- 0-30V DC		20 Amps	1no		
16.	आग्निशमन उपकरण / Fire Fighting Equipment						

Sr No	Equipment	Type	Capacity	Qty
(i)	Fire Extinguisher	DCP	3.2Kgs-1no 5 Kgs-2 nos 6Kgs- 1no	4 nos
(ii)	Fire Extinguisher	Foam CO2	9 LTS 4.5 Kgs	2nos 3nos
(iv)	Fire Buckets and Fire stand	---	----	4nos& 1no
17.	संचार / Communication			
(i)	BSNL Phone	:	Phone number :04365-242536 & Mail id: nagapattinamdgps@gmail.com	
(ii)	Fax Machine	:	Panasonic make, model: KX-FP701 – 1 No (Faulty)	
18.	जलपूर्ति Water Supply	:	Municipal Water Supply (3 Separate lines) up to Sumps and after pumping to over head tank & distributed to all staff Qrs, I.Qrs, etc.,	

19.	भूमि / Land			
(i)	Area	:	0.639 Hectares	
(ii)	Demarcation	:	Compound Wall	
(iii)	No of fruit bearing trees	:	4	
(iv)	No of fruit bearing Coconut trees	:	3	
(v)	No of non –fruit bearing trees	:	38	
20.	इमारतें / Buildings			
21.	Type of compound wall	:	1) RCC wall provided in East/South side 2) Brick masonry wall provided in North & West side	
22.	कंपाउंड लाइट Compound Lights	:	8nos and main gate light-2nos	
23.	कर्मचारीयों/Staff	(i)	Shri.V.Chinnasamy	A.E(E/T)
		(ii)	Shri.C.Kannan	NA Gr-II
		(iii)	Shri.M.Desingh	NA Gr-II
		(iv)	Shri.Gouravkumar	NA Gr-III
		(V)	Out sourced staff	2
24.	पहुँचने का माध्यम / Mode of approach	:	By bus & Rail	
25.	उपलब्ध सुविधाएँ Facilities available	:	Post office at 1Km, Hospital at 1Km, High School at 2 Km & Police Station at 1 Km limits are available	
26.	डाक का पता / Postal address	:	Assistant Engineer (Electronics) Nagapattinam Lighthouse and DGPS, Marawady street, NAGAPATTINAM. Tamil Nadu-611 001.	

27.	चालू करने की तिथि <i>Date of commissioning</i>	:	05-7-1969
28.	Remarks (Date of Conversion)		
	(i)	Conversion from incandescent equipment to MH lamp (Cluster)	: PRB: 21 Equipment was changed with MBR-300 equipment on 30-9-2010
	(ii)	Halogen Lamp to LED Lamp	: NIL

29. Solar System

1. ON Grid : 25KW (Date of Installation: 19-8-2016)

Sl. No	Particulars	Make	Ratings/voltage	Quantity
1.	Solar Panel	M/s EMMVEE	36.8V/315W	80 nos
2.	Mounting Solar Structure
3.	Inverter	M/s Delta	30KW	1 no
4.	AC Distribution Panel			1no
5.	DC Distribution Panel			1no
6.	DATA Logger	M/s Delta		1no
7.				
8.				

2. EARTHINGS

Sl. No	Particulars	Material Size of Earth	Quantity
1.	TowerLightning Arrester	2'X2' size copper plate	1 no.
2.	RACON	„	1 no.
3.	Generator	„	2 nos
4.	Solar panel	„	2nos
5.	Inverter	„	1 no.
6.	RCS	----	1 no
7.	AMF Panel	----	1no
8.	Equipment(DGPS)	----	2nos

OTHER NAVIGATIONAL AIDS :-

01 **Differential Global Positioning System (DGPS) Date of Installation:06.7.2006**

Sr No	Particulars	Qty
(i)	Reference Station MX 9310 (Leica make)	2nos
(ii)	Integrity Monitor MX 9320 (Leica make)	1 no
(iii)	Chock Ring Antenna (Leica make)	3 nos

(iv)	Beacon Antenna (Leica make)	1 no
(v)	Computer with keyboard & mouse "Acer Brand"	1set
(vi)	Transmitter (NAUTEL)	2 nos
(vii)	Automatic tuning Unit (Nautel make)	1 no
(viii)	EPSON LQ 1150 (DOT matrix printer)	1 no
(ix)	Beacon ID Number	113
(x)	Baud rate	9600
(xi)	Operation	Omni Directional
(xii)	Modulation	MSK
(xiii)	Coding	No added coding
(xiv)	RSIM Software	Leica-BSC version 1.2.4
(xv)	Cost of the equipment	Not known
(xvi)	Air conditioners (1.5 Ton, LG Make, split type)	3 nos
(xvii)	Installed on	13.11.2010,27.01.2011 &13.11.2010
(xviii)	Frequency range	323 KHZ

02 NAIS Details with V-SAT / Date of Commissioning: 31-3-2012

Sl.No	Particulars & Sl. No of equipment	Quantity
1	PSS	2 nos
2	Router	1 no
3	Modem	1 no
4	UPS (1KVA) Make: M/s APC	1 no
5	Isolation Transformer	1 no
6	Frequency : 161.975 MHz & 162.025 MHz	---
7	Bit rate: 64 kbps	---

रेकॉन विवरण / RACON Details / Date of Commissioning: 21-12-2018

Sl.No	Particulars & Sl. No of equipment	Quantity
1.	Make: M/s.PHAROS MARINE Model No.PMAPI RACON-2	1 no
	SLNO: 20180764SJP X-BAND	
	Band Range: 9300-9500 MHZ	
	Transmission/Stand by Current: 20mA/118mA	
	Morse Code: --•(G)	

03 स्वचलन उपकरण / Automation Equipment (Date of Installation: 27-02-2014)

Sl.No	Name of Equipments	type	Ratings	Quantity
1	Bottom panel			1 no
2	Top panel			1 no
3	LED type computer	HP make		2 nos
4	LASER printer	HP LaserJet P1108		1 no
5	1 KVA UPS	APC make		2 nos
6	1.5 Ton A/C	Voltas make Split type		1 no
7	V-sat Antenna			1 no