



B.P. PROJECTS PVT. LTD.

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SOLAR MOUNTED BPP HIGH MAST & POLES



B.P. Projects Pvt. Ltd. Has Pioneered in Manufacturing Solar Mounted High Mast, Structure and Poles to Provide Illumination in areas where there is no Electricity. These High Mast and Poles can also be used for Illumination to reduced the dependency on Electricity Generated by conventional non renewable Poluting sources like Coal, Dizel. This usage helps in reducing the Carbon foot print on the nature by our efforts.



The Solar Mounted High Mast are Ground based Erected on suitable Civil Foundation and are of Two Types.



1. Solar Mounted High Mast with raising lowering System

These type of High Mast have Solar Panels mounted on the Top and have a

- a) provision for Fixing of Suitable Battery in a Battery Box beneath the pannels with appropriate Street Light or Flood Light.

The Solar Mounted Frame is suspended by a Winch arrangement which enables

- b) it to be raised and lowred whenever required manually, to clean the Pannels for proper efficiency.

2. The Second type of Solar mounted High Mast is Fixed Type with a provision of Ladder to grow up for cleaning and maintenance purpose.

- * Also there external arrangements like Tower Waganes for cleaning / maintences purpose in large volume.



TROLLEY BASED SOLAR MAST



There is another category of Solar Mounted High Mast Tower which is Mounted on Trolley . and can be raised lowred and towed away to and from the required area . The Foldable Solar Panel and Battery Boxes are Fixed on the Trolley itself. The High Mast can be Raised and Lowred to achieve the desired Height. The Tower can also be Tilted after Lowering to be towed out by suitable Vehicle.



Technical Parameters of BPP Solar High Mast

For 180 KM/ Hour Wind Speed

* High Mast :						
#	Height	06 Meter	07 Meter	09 Meter	10 Meter	12 Meter
#	Make	BPP	BPP	BPP	BPP	BPP
#	No of Solar panel	4	4	6	6	6
#	No of Light	4	4	6	6	6
#	Material Construction	BSEN-10025 (Equivalent)	BSEN-10025 (Equivalent)	BSEN-10025 (Equivalent)	BSEN-10025 (Equivalent)	BSEN-10025 (Equivalent)
#	Cross Section of Mast in polygon (No of Sides)	20/12	20/12	20	20	20
#	Thickness in mm	3 mm	3 mm	3,3 mm	3,3 mm	4 , 3 mm
#	No of Section	1	1	2	2	2
#	Length of individual sections (mm) approx	6000 mm	7000 mm	4750 mm	5300 mm	6300 mm
#	Base dia & Top diameter	310, 150 mm	310, 150 mm	410, 150 mm	460, 150 mm	460, 150 mm
#	Type of joints	-	-	Telescopic Slip Joint		
#	Length of overlap (Joint at site mast section in mm)	-	-	500 mm	600 mm	600 mm
#	Thickness of galvanisation (minimum)	65 micron	65 micron	65 micron	65 micron	65 micron
#	Size of opening door at base(mm) Approx	250 X 900 mm	250 X 900 mm	250 X 900 mm	250 X 900 mm	250 X 900 mm
#	Type of locking arrangement & door construction	Anti Vandalism Type				
#	Size of Base Plate Diameter (mm)	520 mm	520 mm	570 mm	590 mm	590 mm
#	Base Plate Thickness (mm)	16 mm	16 mm	20 mm	20 mm	20 mm
#	Anchor Plate diameter (mm)	520 mm	520 mm	570 mm	590 mm	590 mm
#	Anchor Plate Thickness (mm)	3 mm	3 mm	3 mm	3 mm	3 mm
#	Details of Template	3 mm	3 mm	3 mm	3 mm	3 mm
* Dynamic loading as prevailing actual at Site :						
#	Maximum Wind Speed	180 Km/ H	180 Km/ H	180 Km/ H	180 Km/ H	180 Km/ H
#	Maximum Gust Speed Time	3 Sec.	3 Sec.	3 Sec.	3 Sec.	3 Sec.
#	Height above Ground level at which above	10 Meter	10 Meter	10 Meter	10 Meter	10 Meter
#	Factor of safty for wind load	1.15	1.15	1.15	1.15	1.15
#	Factor of safty for other load	1.15	1.15	1.15	1.15	1.15
* Foundation Detail :						
#	Type of Foundation	RCC	RCC	RCC	RCC	RCC
#	Size of Foundation	As per Design	As per Design	As per Design	As per Design	As per Design
#	Designed load bearing capacity of Soil	As per Soil Report	As per Soil Report	As per Soil Report	As per Soil Report	As per Soil Report
#	Design safety Factor	1.5	1.5	1.5	1.5	1.5
#	Considered wind speed (km/Hr)	180Km/H	180Km/H	180Km/H	180Km/H	180Km/H
#	Depth of Foundation(mm)	As per Design	As per Design	As per Design	As per Design	As per Design
#	No. of Foundation Bolts	6	6	8	8	8
#	PCD of Foundation Bolts (mm)	440 mm	440 mm	490 mm	590 mm	590 mm
#	Bolt Diameter (mm)	25 mm	25mm	25 mm	25mm	32 mm

* Lantern Carriage :					
# Diameter of carriage ring (mm)	800 mm	800 mm	800 mm	800 mm	800 mm
# Construction	48 OD Pipe	48 OD Pipe	48 OD Pipe	48 OD Pipe	48 OD Pipe
# Number of Joints	3	3	3	3	3
# Buffer arrangement between Carriage & Masts	Provided	Provided	Provided	Provided	Provided
# Solar Frame Mounting Arrangement	Provided on Arm With Frame Constructed with 25 X 25 X 3 Angle				
# No of Solar Frame	4	4	6	6	6
# Battery Mounting Arrangement	Provided on Arm				
* Winch :					
# Make of Winch	BPP	BPP	BPP	BPP	BPP
# No. of Drums	2	2	2	2	2
# Capacity	350 Kg	350 Kg	750 Kg	750 Kg	750 Kg
# Operating Speed	410 RPM	410 RPM	410 RPM	410 RPM	410 RPM
# Method of operation	By Manual Handle				
# Lubrication arrangement	YES	YES	YES	YES	YES
# Type of Lubricant	By Grease	By Grease	By Grease	By Grease	By Grease
# Material of construction of Gears	Phosphorous Bronze/EN-19				
# Tested load per drum (kg)	500 Kg	500 Kg	1000 Kg	1000 Kg	1000 Kg
# SWL of winchat 410 rpm	350 Kg	350 Kg	750 Kg	750 Kg	750 Kg
* Wire Rope :					
# Grade	SS / GI	SS / GI	SS / GI	SS / GI	SS / GI
# No of Ropes/ thickness	3	3	3	3	3
# Thixkness	6 mm	6 mm	6 mm	6 mm	6 mm
# Construction	7/19	7/19	7/19	7/19	7/19
# Thimbles and Terminals	As Required	As Required	As Required	As Required	As Required
# Factor safety (specified not less than 5)	5	5	5	5	5

