

**TATA BP SOLAR INDIA LIMITED**  
**PRODUCT SPECIFICATION**  
**SOLAR LED STREET LIGHT - iBeam**

**SYSTEM SPECIFICATION**

- 100Lumen+ per Watt LED based solar streetlight
- Automatic Dusk to Dawn Operation
- Independent standalone solar street lighting system

**SOLAR MODULE**

- High efficiency Mono / Multi crystalline silicon cells
- Designed to withstand tough environment conditions

**BATTERY**

- Low maintenance solar tubular plate lead acid battery
- Once in 6 months top up frequency

**LAMP**

- Power LED Lamp with 50,000+ hours life
- 100 Lumens+ per Watt LEDs
- Aluminium housing with glass/acrylic/polycarbonate cover
- Aluminium reflector on the back for Aesthetics and to reflect any secondary light out of LED housing

**ELECTRONICS**

**Regulator:** 15A Series regulator with Nominal system voltage 12V DC, 24VDC for 60W Streetlight

Dusk to Dawn operation

Separately located inside the battery box

**Indications:**

ON Charge

Battery Low

**LED Driver:** High efficiency Constant current driver giving constant illumination and light maintenance

**Operating Temperature:** 0 to 50°C

**Humidity:** 95 % rh (N.C.)

**LUMINAIRE**

Outdoor Plastic for 7W to 15W, Aluminium luminaire for 15W and higher power with transparent glass/acrylic cover.

IP55 fixture, Fitted with gasket & accessories, does not attract insects

**POLE & STRUCTURE**

4m GI pole supplied with solar module mounting structure for 7W, 15W and 20W

6m GI pole supplied with solar module mounting structure for 30W and above streetlights

**PROTECTIONS**

- Over charge & deep discharge disconnects
- Short circuit protection for lamp
- Battery reverse connection
- Against discharge through array by blocking diode

**FEATURES**

- ♣ Rugged design to operate under worst temperature
- ♣ Automatic ON at dusk and OFF at dawn
- ♣ Integrated design
- ♣ Does not attract Insects

**SPECIFIC STREETLIGHT SPECIFICATIONS**

	7W iBeam	15W iBeam	20W iBeam	30W iBeam	36W iBeam	40W iBeam	50W iBeam	60W iBeam
Light output in Lumens (nominal)	630	1350	1800	2700	3240	3600	4500	5400
System DC voltage in Volts	12	12	12	12	12	12	12	24
Solar Array in Wp	35	80	120	150	180	210	240	340
Solar Panel Configuration	35Wpx1	80Wpx1	60Wpx2	75Wpx2	60Wpx3	70Wpx3	80Wpx3	170Wpx2
Battery Capacity in Ah at C10 discharge rating	40	75	100	150	150	150	200	150
Battery Configuration	40Ahx1	75Ahx1	100Ahx1	150Ahx1	150Ahx1	150Ahx1	100Ahx2	150Ahx2
Autonomy	4+1	3+1	3+1	3+1	2+1	2+1	2+1	2+1
Pole Height in meters	4	4	4	6	6	6	6	6
Equivalent lamp required for similar illumination	11W CFL	22W CFL	30W CFL	45W CFL	55W CFL	60W CFL	70W SOX	85W SOX
Luminaire fixture	Plastic	Plastic/Alum	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium

