



### **Bid Document**

Bid Details		
Bid End Date/Time	09-11-2019 12:00:00	
Bid Life Cycle (From Publish Date)	90 (Days)	
Bid Offer Validity (From End Date)	80 (Days)	
Ministry/State Name	Pmo	
Department Name	Department Of Space	
Organisation Name	Isro	
Office Name	Master Control Facility	
Total Quantity	65	
Item Category	LED Luminaire (For Road and Street Lights)	
MSE Exemption For Years Of Experience And Turnover	No	
Startup Exemption For Years Of Experience And Turnover	No	
Document required from seller	OEM Authorization Certificate	
Bid to RA enabled	No	

# **LED Luminaire (For Road And Street Lights) (65 pieces)**

## **Technical Specifications**

### \* As per GeM Category Specification

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
STANDARDS	LED Luminaire conformity to IS:10322/Part 5/Section 3/2012 latest and IS: 16107 (Part 2/Sec 1):2012 latest	Yes	*
	Photo biological safety of LEDs used shall be as per IS:16108/2012 (exempt group)	Yes	*
	Types of LED Luminaire	Туре В	*

	as per the IS: 16107(Part-2/ Sec1)/2012		
	Types of LED Modules as per the IS:IS: 16103(Part-2)/2012	Type 3	*
	LED Rating (in Watts)/System Wattage/Rated Power	120W	120W
	Luminaire System Efficacy (Lumen/watt)	>/= 100 Lm/Watt	*
	Ingress Protection (IP Rating) as per IS:10322 (Part 1):1982 latest	IP66	*
	Warranty for free replacement (in years)	2	2, 3, 4, 5
ELECTRICAL EFFICIENCY	Input operating Voltage range and frequency	90 to 300 Volts AC at 50 Hz+/-2	*
	Automatic Higher Cut off voltage above 300 volt	Yes	*
	Rated voltage	230 V AC 50 Hz	*
	AC Power Factor at full load	≥ 0.95	*
	Driver Efficiency (in %age) Upto 100W: ≥85%, Above 100W: >/=90%	Yes	*
	Total Harmonics Distortion	≤ 10	*
	"The total circuit power shall not be more than 110 percent of the value declared by the manufacturer (as per Cl. 8 of IS:16104:2012 lates)"	Yes	*
OPTICAL	LED chip Efficacy	≥130 Lm/Watt	*
	Colour temperature	6000+/-500K	*
	Working life for LED (Minimum 50,000 burning hours as per LM-80 and LM 21 reports)	Yes	*
	Colour Rendering Index(CRI)	≥70	*

	LED Beam Angle	≥120	*
	Optic lense materal (UV stabilised)	Poly carbonate lense	*
THERMAL MANAGEMENT	Heat sink should be die- cast aluminium along with sufficient heat sink fins to dissipate heat effectively	Yes	*
	Junctiojn / Soldering point temperature shall not exceed 85 deg.c as per LM 80 report	Yes	*
	Capacitor shall be rated for a temperature of 105 deg. celsius or better	Yes	*
	Operating temperature range	-10 deg C to +50 deg C	-10 deg C to +50 deg C
	Operating Humidity Range	10 % to 95% RH	*
PROTECTION	Short circuit Protection	Yes	*
	Over load protecton	Yes	*
	Over Voltage protection	Yes	*
	Reverse polarity	Yes	*
	High voltage test (1.5 KV for one minute between supply terminals and body of the unit)	Yes	*
	Insulation resistance between earth and current carrying part	>100 M Ohm	*
	The luminaire shall be protected against surges and transients (Internal)	>/=4KV	*
	The luminaire shall be protected against surges and transients of >/=10KV (External)	Yes	*
CONSTRUCTIONAL	The Luminaires casing/housing (single piece housing) shall be pressure die casted aluminium alloy with higher thermal conductivity	Yes	*
	The luminaire body must be corrosion	Yes	*

resistant powder coated		
All fastners must be of stainless steel	Yes	*
Protection of the entire housing (both LED section and driver section) as per IS:10322 (Part 1):1982 latest	IP66	*
Extruded silicon loop gasket shall be provided in the lantern body to ensure a weather proof seal between the UV Glass cover and the metal housing to exclude the entry of the dust, water, insects etc.,	Yes	*
Luminaries light transparency should be of Toughened glass	Yes	*
Toughned transparent glass cover thickness	>/=4 mm	*
Toughned Glass shall not get discoloured shall not suffer degration due to heat and ageing within warranty period	Yes	*
Number of electronic control gear (power supplies)	1 No.	1 No.
Light Source	SMD LED Chip as per LM 80/IS16106	*
Driver components shall be industrial grade or above	Yes	*
PCB shall be FR4 grade minimum 0.8 to 1.0 mm thick or more	Yes	*
The Luminaires works on single phase three wires system (Phase, Neutral and Earth)	Yes	*
Suitable connector shall be provided for LED connection between driver output and LED	Yes	*

	Length of ISI marked three core wire (shall be provided along with supply of material)	50 cm	50 cm, 100 cm
MARKING	"Manufactures Name and and brand on the aluminium die cast body "	Engraved/Embossed	*
	Manufacturer's name, model number, serial number	Yes	*
	Date of manufacture (month-year), and lot number as identification mark inside each unit and the outside of each packaging box	Yes	*
	The operation characteristics voltage and power be marked inside of each LED luminaire unit	Yes	*
	Diameter of pole Luminiare suitable for: (upto 45W Pole OD: shall be 40mm), (>45W<120W Pole OD: Shall be 50 mm), (above 120W: OD shall be 60 mm for which luminiare is suitable	Yes	*
REPORTS AND CERTIFICATIONS	LED Make	OSRAM / NICHIA / CREE / SAMSUNG / SEOUL / LUMILEDS / PHILIPS / SYSKA / LUMENMAX / EVERLIGHT / EDISON / BRIDGELUX / NATIONSTAR / REFOND	*
	System must have EMI/EMC compliance as applicable (Test reports shall be furnish to the buyer / consignee on demand)	Yes	*
	LM 79 (Photometry) (Ref.IS:16106:2012) report from Central Government Lab /NABL/ILAC accrediated lab. Reports shall be furnish to the buyer /	Yes	*

consignee on demand (LM-79 report shall have total lumen output, power, PF, Current in Amps, CRI & CCT etc.,)		
LM 80 & TM 21 (Ref. IS:16105:2012) Report and Photo biological report for LED report from Central Government Lab /NABL/ILAC accrediated lab. Reports shall be furnish to the buyer / consignee on demand (LM-80 report shall have the Pohoto Biological report of the LED Chip being used in the luminaire)	Yes	*
Availability of test Report from Central Government Lab /NABL/ILAC accrediated lab to Indian Standrad IS:10322/part 5/sec-3/2012 and IS 16107 (Part 2/Sec 1): 2012	Yes	*
Seller shall furnish the Type test reports to the buyer / consignee on demand	Yes	*
DC or AC supplied electronic control gear for LED Module shall comlpy as per IS:15885 (Part 2/Sec.13)	Yes	*
LED Luminaire for road and street lighting shall comply with Complusory Registration(CRS) of BIS for safety as per IS 10322 (Part 5/Section 3): 2012 as applicable on date  * Specifications highlighted in bold are the Golde	Yes	*

## **Consignees/Reporting Officer and Quantity**

<sup>\*</sup> Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement ( allowed Values) by the Buyer.

S.No.	Consignee/Reporti ng Officer	Address	Quantity	Delivery Days
1	M R S Prasanna	573201,MASTER CONTROL FACILITY-ISRO, SALAGAME ROAD	65	30

#### **EMD Detail**

Required	No
11	

#### ePBG Detail

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#### **Splitting**

Bid splitting not applied.

## **Buyer Specific Additional Terms and Conditions**

- 1. OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.
- 2. Scope of supply (Bid price to include all cost components): Only supply of Goods
- 3. Timely Servicing / rectification of defects during warranty period: After having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within 7 days time limit. If the Seller fails to complete service / rectification with defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG).Cumulative Penalty cannot exceed more than 10% of the total contract value after which the Buyer shall have the right to get the service / rectification done from alternate sources at the risk and cost of the Seller besides forfeiture of PBG. Seller shall be liable to re-imberse the cost of such service / rectification to the Buyer.

This Bid is also governed by the General Terms and Conditions

---Thank You---