

Bid Number: GEM/2020/B/705403

Dated: 10-07-2020

## **Bid Document**

Bid Document				
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- 1				

#### **EMD Detail**

Required	No

#### ePBG Detail

Required	No

### Splitting

Bid splitting not applied.

- 1. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU / Public Listed Company for number of years as indicated in the bid document before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the year. In case of bunch bids, the category of primary product having highest value should meet this criterion.
- 2. OEM Turn Over Criteria: The minimum average annual financial turnover of the OEM of the offered product during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the OEM is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.

# LED Luminaire (For Road And Street Lights) (150 pieces)

#### **Technical Specifications**

#### \* As per GeM Category Specification

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
3/2012 latest and IS: 16107 (Part 2/Sec	conformity to IS:10322/Part 5/Section 3/2012 latest and IS:	Yes	*
	Photo biological safety of LEDs used shall be as per IS:16108/2012 (exempt group)	Yes	*
	Types of LED Luminaire as per the IS: 16107(Part-2/Sec1)/2012	Type B	*
	Types of LED Modules as per the IS:IS: 16103(Part-2)/2012	Type 3	*
	LED Rating (in Watts)/System Wattage/Rated Power	45W	45W
	Luminaire System Efficacy (Lumen/watt)	>/= 100 Lm/Watt	*

	Ingress Protection (IP Rating) as per IS:10322 (Part 1):1982 latest	IP67	*
	Warranty for free replacement (in years)	2	2
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	-20 deg. C to +50 deg. C	-20 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)	No	*
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 resistant powder coated	Yes	*
	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	Yes	*

	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.,		
	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
MARKING	"Manufactures Name and and brand on the aluminium die cast body "	Engraved/Embossed	*
	Manufacturer's name, model number, serial	Yes	*

	number		
	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 / consignee on demand (LM-79 report shall have total lumen output, power, PF, Current in Amps, CRI & CCT etc.,)	Yes	*
	LM 80 & TM 21 (Ref. IS:16105:2012) Report and Photo biological report for LED report from Central Government Lab	Yes	*

/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)		
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		*

<sup>\*</sup> Specifications highlighted in bold are the Golden Parameters.

### **Additional Specification Documents**

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

S.No.	Consignee/Reporti ng Officer	Address	Quantity	Delivery Days
1	Shambhu Kumar Singh	815301,Municipal Corporation, Giridih	150	20

<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.

# **Bid Specific Additional Terms and Conditions**

1. Dedicated /toll Free Telephone No. for Service Support : BIDDER/OEM must have Dedicated/toll Free Telephone No. for Service Support.

This Bid is also governed by the General Terms and Conditions

---Thank You---