

### Bid Document

| Bid Details  |   |
|--|---|
| Bid End Date/Time                                      | 31-10-2019 16:00:00   |
| Bid Life Cycle (From Publish Date)                     | 90 (Days)   |
| Bid Offer Validity (From End Date)                     | 30 (Days)   |
| Ministry/State Name                                    | Puducherry  |
| Department Name  | Local Administration Department Puducherry  |
| Organisation Name                                      | N/a   |
| Office Name  | Mahe Municipality   |
| Total Quantity   | 100   |
| Item Category  | LED Luminaire (For Road and Street Lights)  |
| Experience with Government Required                    | 2 Year (s)  |
| MSE Exemption For Years Of Experience And Turnover     | No  |
| Startup Exemption For Years Of Experience And Turnover | No  |
| Document required from seller                          | Experience with Government,Certificate (Requested in ATC),OEM Authorization Certificate |
| Bid to RA enabled                                      | No  |

### LED Luminaire (For Road And Street Lights) ( 100 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   | Yes    | *                                |

|                       |   |                                 |      |
|-----------------------|---|---------------------------------|------|
|                       | (exempt group)  |                                 |      |
|                       | Types of LED Luminaire as per the IS: 16107(Part-2/ Sec.-1)/2012  | Type B                          | *    |
|                       | Types of LED Modules as per the IS:IS: 16103(Part-2)/2012   | Type 3                          | *    |
|                       | <b>LED Rating (in Watts)/System Wattage/Rated Power</b>   | 18W                             | 18W  |
|                       | Luminaire System Efficacy (Lumen/watt)  | $\geq 100$ Lm/Watt              | *    |
|                       | Ingress Protection (IP Rating) as per IS:10322 (Part 1):1982 latest   | IP66                            | *    |
|                       | <b>Warranty for free replacement (in years)</b>   | 5                               | 3, 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  | $\geq 0.95$                     | *    |
|                       | Driver Efficiency (in %age) Upto 100W: $\geq 85\%$ , Above 100W: $\geq 90\%$  | Yes                             | *    |
|                       | Total Harmonics Distortion  | $\leq 10$                       | *    |
|                       | "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 latest)" | Yes                             | *    |
| OPTICAL               | LED chip Efficacy   | $\geq 130$ Lm/Watt              | *    |
|                       | Colour temperature  | 6000+/-500K                     | *    |
|                       | Working life for LED (Minimum 50,000 burning hours as per LM-80 and LM 21 reports)  | Yes                             | *    |

|                       |  |                        |                        |
|-----------------------|--|------------------------|------------------------|
| THERMAL<br>MANAGEMENT | Colour Rendering Index(CRI)  | ≥70                    | *                      |
|                       | LED Beam Angle   | ≥120                   | *                      |
|                       | Optic lense materal (UV stabilised)  | Poly carbonate lense   | *                      |
|                       | 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                    | *                      |
|                       | <b>Operating temperature range</b>   | -10 deg C to +55 deg C | -10 deg C to +55 deg C |
|                       | Operating Humidity Range   | 10 % to 95% RH         | *                      |
|                       | Short circuit Protection   | Yes                    | *                      |
|                       | Over load protecton  | Yes                    | *                      |
| PROTECTION            | 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                    | *                      |
|                       | The Luminaires casing/housing (single piece housing) shall be pressure die casted aluminium alloy with higher thermal conductivity | Yes                    | *                      |
| CONSTRUCTIONAL        |  |                        |                        |

|   |                                   |       |
|---|-----------------------------------|-------|
| 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 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 degradation due to heat and ageing within warranty period   | Yes                               | *     |
| <b>Number of electronic control gear (power supplies)</b>   | 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   | Yes                               | *     |

|                            |   |  |               |
|----------------------------|---|--|---------------|
|                            | between driver output and LED   |  |               |
|                            | <b>Length of ISI marked three core wire (shall be provided along with supply of material)</b>   | 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 Luminaire 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 luminaire 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 accredited   | Yes  | *             |

|   |     |   |
|---|-----|---|
| 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.,)  |     |   |
| LM 80 & TM 21 (Ref. IS:16105:2012) Report and Photo biological report for LED report from Central Government Lab /NABL/ILAC accredited lab. Reports shall be furnish to the buyer / consignee on demand (LM-80 report shall have the Photo Biological report of the LED Chip being used in the luminaire) | Yes | * |
| Availability of test Report from Central Government Lab /NABL/ILAC accredited lab to Indian Standard 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 comply as per IS:15885 (Part 2/Sec.13)   | Yes | * |
| LED Luminaire for road and street lighting shall comply with Compulsory Registration(CRS) of BIS for safety as per IS 10322 (Part 5/Section 3): 2012 as applicable on date  | Yes | * |

\* Specifications highlighted in bold are the Golden Parameters.

\* 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.

**Consignees/Reporting Officer and Quantity**

| S.No. | Consignee/Reporting Officer | Address                                     | Quantity | Delivery Days |
|-------|-----------------------------|---|----------|---------------|
| 1     | Reena K A                   | 673310, Mahe Municipality, Main Road - Mahe | 100      | 30            |

**EMD Detail**

|          |    |
|----------|----|
| Required | No |
|----------|----|

**ePBG Detail**

|          |    |
|----------|----|
| Required | No |
|----------|----|

**Splitting**

Bid splitting not applied.

**Buyer Specific Additional Terms and Conditions**

1. Scope of supply (Bid price to include all cost components) : Only supply of Goods

[This Bid is also governed by the General Terms and Conditions](#)

**---Thank You---**