### Technical Specification for Handheld Speed Radar

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<tr>
<th>Sl. No.</th>
<th>Technical Specification</th>
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<tbody>
<tr>
<td>1</td>
<td>The Laser unit should be able to measure distance, as well as speed of the target vehicle up to a distance of 200 mtrs. from the unit. More distance capabilities are preferred.</td>
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<td>2</td>
<td>The Laser unit should be compact in size and weigh not more than 1.2 Kgs for easy handling.</td>
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<td>3</td>
<td>The Laser unit should have Automatic and Manual Measurement modes, and should measure approaching and departing targets.</td>
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<td>4</td>
<td>The Laser unit should be able to detect laser jammers fitted in the target vehicles, if any (Optional).</td>
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<td>5</td>
<td>The Laser unit should have HUD with Brightness Control Glass fitted. It should also have a bright LCD Display with Back Light. The HUD should be a plain glass for easy targeting of vehicle at all distance range.</td>
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<td>6</td>
<td>Laser Beam Divergence: not more than 2.5 m rad <em>(Bidder shall enclose laboratory test report against this parameter)</em></td>
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<td>7</td>
<td>Distance Accuracy: +/- 20cms or better <em>(Bidder shall enclose laboratory test report against this parameter)</em></td>
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<td>8</td>
<td>Measuring Time: Less than 0.3 second <em>(Bidder shall enclose laboratory test report against this parameter)</em></td>
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<td>9</td>
<td>Speed Range: Up to 320 Km/hr <em>(Bidder shall enclose laboratory test report against this parameter)</em></td>
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<td>10</td>
<td>Speed Accuracy: Maximum permissible +/- 2Km/hr up to 100Km/hr speed and +/- 3Km/hr above 100Km/hr speed <em>(Bidder shall enclose laboratory test report against this parameter)</em></td>
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<td>11</td>
<td>Measuring device should meet requirements of laser class 1 as per IEC60825-1:2007. <em>(Bidder shall enclose laboratory test report against this parameter)</em></td>
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<td>12</td>
<td>Operating Temperature: 0 Degrees to 60 Degrees</td>
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<td>13</td>
<td>The Laser unit should run on rechargeable Li-on / Li-Polymer batteries. Suitable charger should be provided for the same. The working time of the inbuilt battery shall be at least 8 hours under normal operation.</td>
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<td>14</td>
<td>The Laser unit shall be provided with extra spare battery for un-interrupted usage. The battery shall be easy to replace by the user at the location itself. There should be easy open and lock system and not have any screws to open the battery cover to replace the battery if required. The Battery handle shall be fixed to main body to avoid any loose contact with usage any time in future, only the battery shall be replaceable without removal of the complete handle.</td>
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<td>15</td>
<td>The Laser unit should have Sleep Mode to save power where the HUD and Display shall turn off automatically in case the user does not press any button or trigger for a specified time period. From Sleep Mode the laser unit shall come back to Standby Mode by pressing the trigger.</td>
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<td>16</td>
<td>The Laser unit should have record memory for storing at least 500 previous records with record no., date, time, speed limit and target speed. It should be possible to see any previous record and take print of the same from the Laser unit itself. These records shall be transferable to PC as and when required. Record memory deletion shall not be possible from the Laser unit. It shall be only possible to delete the previous records through PC software only. The downloaded record data shall be tamper proof and encrypted as per AES128 encryption standard and shall be viewable only in the OEM supplied software.</td>
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</tbody>
</table>
| 17   | **Print Out Specifications of receipt print Out:**  
  a. Printout receipt shall give have the following information: Date, Time, Speed of the Vehicle, User settable speed limit, Vehicle Number and DL No. with blank spaces for writing by hand, and place for signature of the driver and the officer.  
  b. The printer should be thermal one using ordinary 57mm thermal paper available in the market. Similar Printer which are durable and can be easily maintained can also be quoted.  
  c. The printer should have an inbuilt rechargeable battery. It should work on Bluetooth/Wireless Technology and should print wirelessly from a distance of up to 5 mtrs. from the laser unit. |
| 18   | The Bidder should produce Tender Specific OEM Authorization Certificate for the quoted Item. In case the bidder is an Authorized dealer they should give full address and contact details of their OEM. In case the bidder is claiming to be the manufacturer of the quoted model of Hand Held Speed Gun, they should furnish valid manufacturing licenses and should give detailed list of their in-house manufacturing machinery and testing equipment. The provided information might be verified with the department's visit during the technical analysis of the bid. |
| 19   | Warranty – Warranty support for 3 years to be included and AMC rate for 3 years after warranty period |