**Technical Specification**

**120° high resolution long-range LiDAR sensor**

The subject of the public contract is the delivery of a set of 4 pcs of 120° high resolution long-range LiDAR (Light Detection and Ranging) sensors. The performance also includes transport to the place of performance. All sensors in the set shall be identical.

**120° high resolution long-range LiDAR sensor manufacturer:**  *to be completed by the tenderer*

**Exact type designation of the 120° high resolution long-range LiDAR sensor:** *to be completed by the tenderer*

**Number of pieces:**  **4**

**The 120° high resolution long-range LiDAR sensor must have at least the following components and must fulfil at least the following parameters:**

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| --- | --- | --- |
| **Basic technical parameters** | **Minimum required values - must be met!** | **Value of the offered device** |
| Range (@10% reflectivity) | Min. 180 m | *the tenderer shall indicate YES/NO and the specific value of the offered device* |
| Field of view (horizontal × vertical) | 120°x25° | *the tenderer shall indicate YES/NO* |
| Weight (sensor only) | <1 000 g | *the tenderer shall indicate YES/NO and the specific value of the offered device* |
| Power consumption (nominal) | <19 W | *the tenderer shall indicate YES/NO* |
| Points per second (Single return) | Min. 1 500 000 pts/s | *the tenderer shall indicate YES/NO and the specific value of the offered device* |
| Frame rate (configurable) | 10 Hz/20 Hz | *the tenderer shall indicate YES/NO* |
| Operating voltage  | Min. 9-16 V | *the tenderer shall indicate YES/NO* |
| Application area  | Automotive industry | *the tenderer shall indicate YES/NO* |
| Scanning method  | Rotating mirror | *the tenderer shall indicate YES/NO* |
| Number of channels | Min. 128 | *the tenderer shall indicate YES/NO and the specific value of the offered device* |
| Operating temperature  | Min. –40 ℃ to +85 ℃ | *the tenderer shall indicate YES/NO* |
| Time synchronization | PTP (IEEE 1588 nebo 802.1AS)  | *the tenderer shall indicate YES/NO* |
| Laser safety class  | Class 1 – Eye-safe | *the tenderer shall indicate YES/NO* |
| Data per point | Range, azimuth angle and reflectivity | *the tenderer shall indicate YES/NO* |
| Range accuracy  | Max. ±5 cm | *the tenderer shall indicate YES/NO* |
| Ingress protection  | Min. IP6K7 | *the tenderer shall indicate YES/NO* |

*The data shall be completed by the tenderer in accordance with the technical data of the offered device.*