

## Robin E1X LiDAR

Robin E1X is an automotive-grade LiDAR developed by Seyond on its new-generation product platform. Robin E1X features a maximum 300-meter range and offers a 120°(H)×20°(V) field of view, delivering full-field 0.1°(H)×0.2°(V) image-level resolution point clouds. Robin E1X adopts a platform-based design that significantly simplifies the core optical scanning structure, greatly enhancing point cloud consistency. Its compact body maintains ultra-low power consumption and is designed for easy mass production, ensuring superior stability and reliability. Robin E1X is used in automotive (AD/ADAS) sectors, robotics, Intelligent transportation systems and Smart infrastructure.

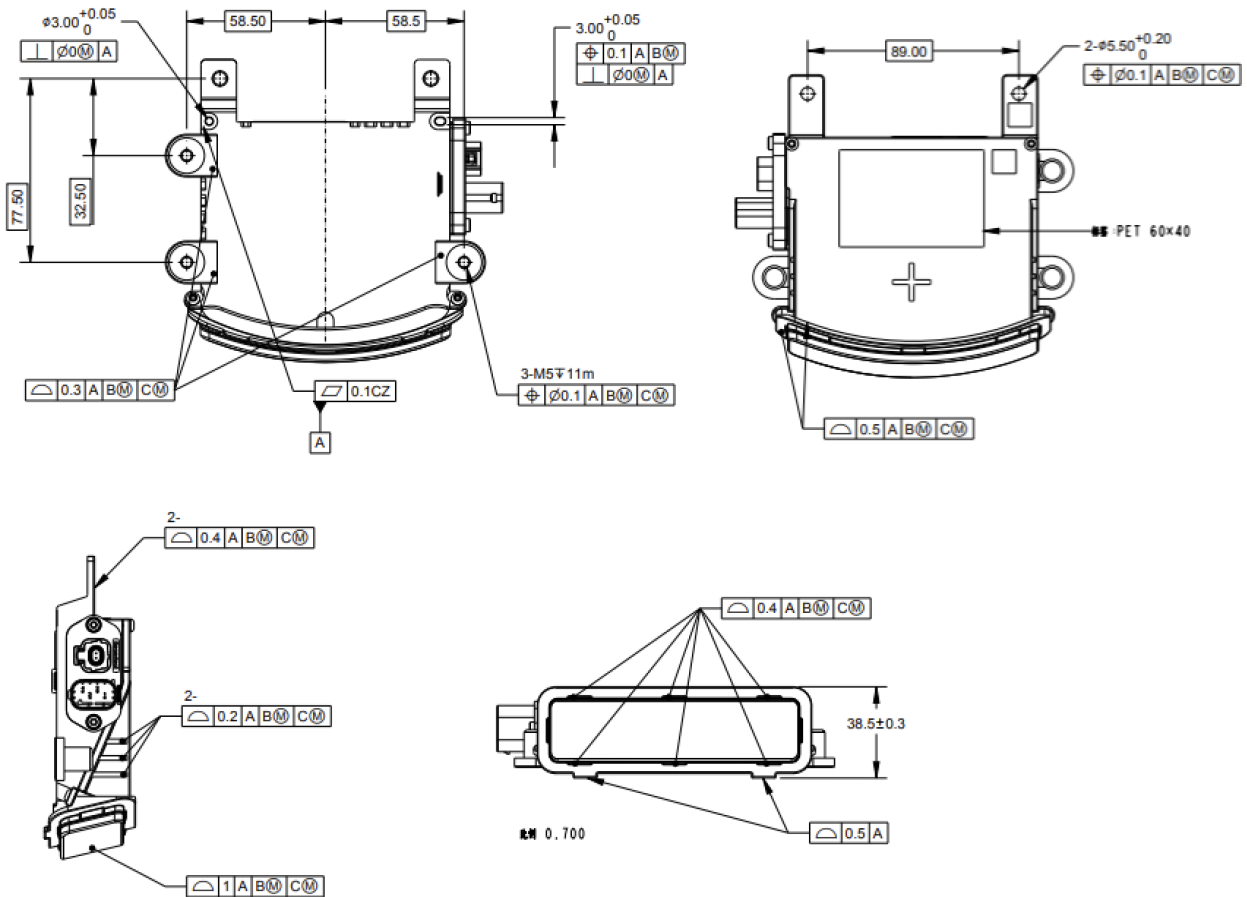


## Specifications

| OPTICAL PERFORMANCE                                   |   |
|---|---|
| Detection Range                                       | 1 - 300 m   |
| Detection Range (10% Lambertian reflectivity @ 10 Hz) | 200 m (10% Lambertian reflectivity @ 10 Hz)   |
| Detection Range Precision                             | 3 cm @1 $\sigma$  |
| Detection Range Accuracy                              | $\pm$ 5 cm  |
| FOV (H $\times$ V)                                    | 120° $\times$ 20°   |
| Resolution (H $\times$ V)                             | 1200 $\times$ 96  |
| Angular Resolution (H $\times$ V)                     | 0.1° $\times$ 0.2°  |
| Angular Accuracy                                      | $\pm$ 0.1°  |
| Frame Rate*   | 10 FPS configurable   |
| # of Returns  | Up to 2 returns   |
| LASER   |   |
| Laser Safety Class                                    | Class 1 (IEC 60825-1)   |
| Laser Wavelength                                      | 940 nm  |
| MECHANICAL /ELECTRICAL                                |   |
| Power Consumption                                     | 6 W (nominal)   |
| Operating Voltage                                     | 9 to 16 V DC  |
| Operating Current                                     | 0.5 A@12 V  |
| Connector   | Ethernet: H-MTD Interface (USCAR: 777-S-002-1-Z01)<br>4PIN: TE Micro Quadlok system Interface (114-18063-124) |
| Weight  | 470 g   |
| Dimensions (H $\times$ W $\times$ D)                  | 30 mm $\times$ 106 mm $\times$ 101 mm   |
| OPERATIONAL   |   |
| Operating Temperature                                 | -40 °C to + 85 °C   |
| Storage Temperature                                   | -40 °C to + 105 °C  |
| Ingress Protection                                    | IP67(body), IP69K(window)   |
| Shock   | IEC 60068-2-27  |
| Vibration   | IEC 60068-2-64  |
| LIDAR OUTPUT  |   |

|                          |   |
|--------------------------|---|
| Data transmission        | 1000Base-T1 Ethernet, compatible with 100Base-T1 (UDP, TCP) |
| Data Output              | radius, azimuth, reflectivity, timestamp                    |
| Points Per Second        | 1,152,000 Points/sec (single return@10Hz)                   |
| <b>CONTROL INTERFACE</b> |   |
| Communication Interface  | TCP and HTTP APIs   |
| Time Synchronization     | IEEE1588 (PTP), IEEE 802.1as (gPTP) ,NTP                    |
| <b>ACCESSORIES</b>       |   |
| Optional Wire Harness    | 5m cable (power & Ethernet)                                 |
| Optional Converter       | MetAdaptor  |
| <b>SOFTWARE</b>          |   |
| Available Drivers        | Client SDK, ROS/ROS2  |

### Dimensions (Unit: mm)



\*Specifications are subject to change without notice and based on engineering targets. Specs are not guaranteed to have passed full validation at the time of publication.