

LARA

LidaAr controlleR boARd

LARA is an exclusive LIDAR controller board, able to manage all type of LIDAR system (even if complex) with small factor technology, great performances and customization.

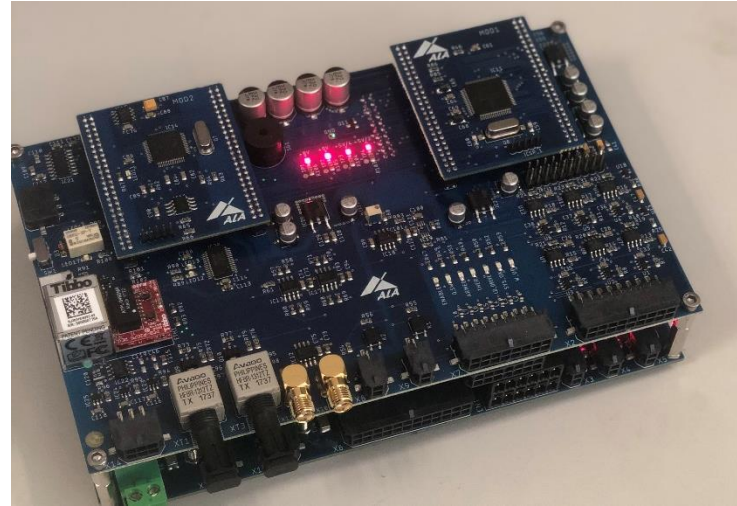
LIDAR systems are made up of several components working together to give high-level accuracy; since a single device integrates a wide number of independent elements, it can generate critical ranging data.

LARA overcomes this limit, combining the electronical parts in an exclusive and complex way, which simplifies user's action and provides many benefits, in particular in terms of signal-to-noise ratio. Hardware and software are combined in a perfect match to perform the best users' experience and to achieve the best results making easy even the most complex procedures.

LARA can communicate with the host PC via Ethernet, USB, and RS232.

It is provided with an intuitive and user-friendly software, running under Windows, allowing users to configure the board to meet all their needs and manage a LIDAR system in few and easy steps.

LARA is available in three models: *LARA Basic*, *LARA Advanced*, and *LARA Light*.



LARA is a:

- low noise **DC-DC converter**:
- **laser controller**
- **detectors controller**
- **servo-motor controller**
- **sensor controller**



Technical Specifications

| <i>Communications</i> | <i>LARA</i> | <i>LARA Advanced</i> | <i>LARA Light</i> |
|--|-----------------|----------------------|-------------------|
| <i>RS232</i> | ✓ | ✓ | x |
| <i>Ethernet</i> | ✓ | ✓ | ✓ |
| <i>USB</i> | ✓ | ✓ | ✓ |
| <i>Output</i> | | | |
| <i>12V-2.5 A</i> | 4 | 4 | 1 |
| <i>5V-4.5 A</i> | 2 | 2 | 1 |
| <i>Opto-isolated 60V@500mA</i> | ✓ | ✓ | x |
| <i>Relay 2NO&2NC, 30V@2A</i> | ✓ | ✓ | x |
| <i>Detectors</i> | up to 6 | up to 12 | up to 4 |
| <i>Servos</i> | up to 8 | up to 16 | up to 6 |
| <i>Electrical trigger (20Hz-2kHz)</i> | 2 | 2 | 1 |
| <i>Optical Trigger</i> | 2 | 2 | 1 |
| <i>NTC</i> | 3 | 3 | 1 |
| <i>MEMS gyroscope</i> | <i>optional</i> | <i>optional</i> | x |