

# Areté

## AIRTRAC®

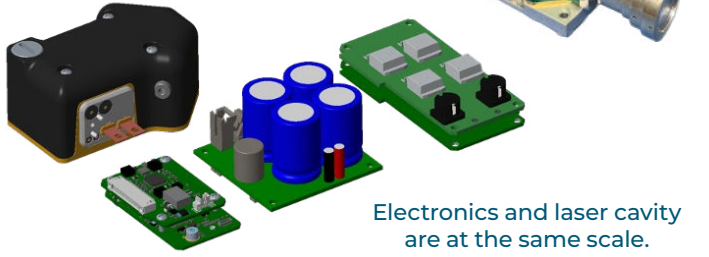


Areté's family of AIRTRAC lasers offer NATO STANAG 3733 compliant capability in rugged, very compact, lightweight and low power draw configuration. The athermal design of Arété's patented AIRTRAC configuration provides stable energy and beam quality over the full MIL-SPEC temperature range. AIRTRAC has established a new standard in size for lasers of this class.

|  |   |  |  |   |  |
|--|---|--|--|---|--|
|  | <p><b>AIRTRAC-LP</b></p> <ul style="list-style-type: none"> <li>· Dual energy mode capability</li> <li>· NATO STANAG 3733 compliant</li> <li>· Non-ITAR</li> </ul>  | <p><b>Dual Energy:</b></p> <p>Low &gt; 35 mJ<br/>High &gt; 50 mJ</p> | <p><b>Weight (w/ Electronics):</b></p> <p>320 g</p>      | <p><b>Average Power Draw:</b></p> <p>25 W</p>   | <p><b>Cavity Dimensions (L x W x H):</b></p> <p>2.7" x 1.9" x 1.3"</p> |
|  | <p><b>AIRTRAC-E</b></p> <ul style="list-style-type: none"> <li>· Lower cost and energy version of AIRTRAC-LP</li> <li>· Suitable for integration into smaller systems (fewer electronics boards)</li> <li>· Non-ITAR</li> </ul>                       | <p><b>Energy:</b></p> <p>&gt; 30 mJ</p>                              | <p><b>Weight (w/ Electronics):</b></p> <p>220 g</p>      | <p><b>Average Power Draw:</b></p> <p>30 W</p>   | <p><b>Cavity Dimensions (L x W x H):</b></p> <p>2.7" x 1.9" x 1.3"</p> |
|  | <p><b>AIRTRAC-HP</b></p> <ul style="list-style-type: none"> <li>· High laser pulse energy</li> <li>· New standard in size for this energy</li> <li>· Designed for long-range designation</li> <li>· Non-ITAR</li> </ul>                               | <p><b>Energy:</b></p> <p>&gt; 120 mJ</p>                             | <p><b>Weight (w/ Electronics):</b></p> <p>515 g</p>      | <p><b>Average Power Draw:</b></p> <p>45 W</p>   | <p><b>Cavity Dimensions (L x W x H):</b></p> <p>4" x 4" x 2.25"</p>    |
|  | <p><b>AIRTRAC-MINI</b></p> <ul style="list-style-type: none"> <li>· Low SWaP (Size, Weight, and Power)</li> <li>· Lower cost version and designed specifically for attritable applications and Group-1 UAS integration</li> <li>· Non-ITAR</li> </ul> | <p><b>Energy:</b></p> <p>&gt; 15 mJ</p>                              | <p><b>Weight (w/ Electronics):</b></p> <p>&lt; 100 g</p> | <p><b>Average Power Draw:</b></p> <p>12.5 W</p> | <p><b>Cavity Dimensions (L x W x H):</b></p> <p>3" x 1.5" x 1.25"</p>  |

## Typical AIRTRAC-LP Configuration

Customizable customer configurations available.



Electronics and laser cavity are at the same scale.

### Electronic Boards Used

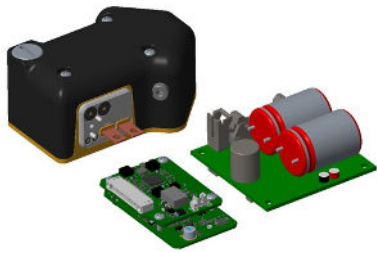
| Component Name and Part Number                    | Qty Needed for System |
|---|-----------------------|
| HV Drive Electronics, P/N 100205-0001             | 1                     |
| Diode Driver 4 Capacitor Version, P/N 112227-0001 | 1                     |
| Diode Driver 2 Capacitor Version                  | Not Required**        |
| AIRTRAC Control Stack, P/N 101825-0001            | 1                     |

### Telescope Options and Beam Divergence

| Available Telescopes* | Divergence |
|-----------------------|------------|
| 6X                    | < 250 urad |
| 5X                    | < 300 urad |
| 3X                    | < 500 urad |

\* Custom telescopes or customer design can be considered  
 \*\* Testing under way to determine the use of 2 capacitor diode driver

## AIRTRAC-E (Available in Prototypes)



Electronics and laser cavity are at the same scale.



### Electronic Components

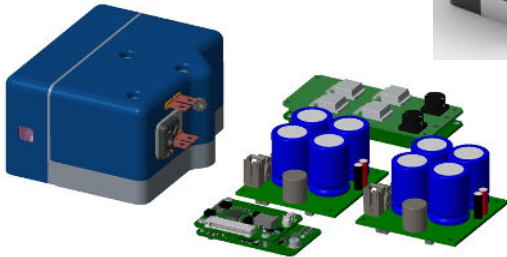
| Component Name and Part Number         | Qty Needed for System |
|--|-----------------------|
| Diode Driver 2 Capacitor Version       | 1                     |
| AIRTRAC Control Stack, P/N 101825-0001 | 1                     |

### Telescope Options and Beam Divergence

| Available Telescopes* | Divergence |
|-----------------------|------------|
| 6X                    | < 250 urad |
| 5X                    | < 300 urad |
| 3X                    | < 500 urad |

\* custom telescopes or customer design can be considered

## AIRTRAC-HP (Available in Prototypes)



Electronics and laser cavity are at the same scale.



### Electronic Components

| Component Name and Part Number                    | Qty Needed for System |
|---|-----------------------|
| HV Drive Electronics, P/N 100205-0001             | 1                     |
| Diode Driver 4 Capacitor Version, P/N 112227-0001 | 2                     |
| Diode Driver 2 Capacitor Version                  | Not Required**        |
| AIRTRAC Control Stack, P/N 101825-0001            | 1                     |

### Telescope Options and Beam Divergence

| Available Telescopes* | Divergence |
|-----------------------|------------|
| 6X                    | < 250 urad |
| 5X                    | < 300 urad |
| 3X                    | < 500 urad |

\* custom telescopes or customer design can be considered  
 \*\* Testing under way to determine the use of the 2 Capacitor diode driver

## AIRTRAC-MINI (Product in Development)

Production Electronics are under development for new reduced size PCA

Testing is performed with current electronics



### Electronic Components

| Component Name and Part Number | Qty Needed for System |
|--------------------------------|-----------------------|
| HV Drive Electronics           | Under Development     |
| Diode Driver                   |                       |
| AIRTRAC Control Board          |                       |

### Beam Characteristics

|            |            |
|------------|------------|
| Divergence | < 750 urad |
|------------|------------|

