

Areté

AIRTRAC®



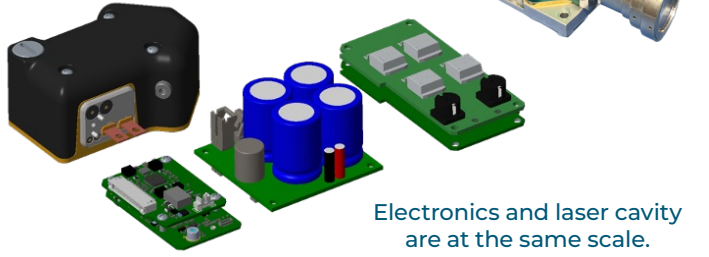
Areté's family of AIRTRAC Laser Designators offer NATO STANAG 3733 compliant capability in rugged, very compact, lightweight and low power draw configuration. The athermal design of Arété's patented AIRTRAC configuration provides stable energy and beam quality over the full MIL-SPEC temperature range.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

	<p>AIRTRAC-LD</p> <ul style="list-style-type: none"> · Dual energy mode capability · NATO STANAG 3733 compliant <p>* AIRTRAC-LD+ available at >70 mJ</p>	<p>Dual Energy:</p> <p>Low > 35 mJ High > 50 mJ*</p>	<p>Weight (w/ Electronics):</p> <p>320 g</p>	<p>Average Power Draw:</p> <p>36 W</p>	<p>Cavity Dimensions (L x W x H):</p> <p>2.7" x 1.9" x 1.3"</p>
	<p>AIRTRAC-E</p> <ul style="list-style-type: none"> · Lower cost and energy version of AIRTRAC-LD · Non-ITAR · Suitable for integration into smaller systems (fewer electronics boards) 	<p>Energy:</p> <p>> 30 mJ</p>	<p>Weight (w/ Electronics):</p> <p>220 g</p>	<p>Average Power Draw:</p> <p>32 W</p>	<p>Cavity Dimensions (L x W x H):</p> <p>2.7" x 1.9" x 1.3"</p>
	<p>AIRTRAC-HP</p> <ul style="list-style-type: none"> · High laser pulse energy · New standard in size for this energy · Designed for long-range designation 	<p>Energy:</p> <p>> 120 mJ</p>	<p>Weight (w/ Electronics):</p> <p>468 g</p>	<p>Average Power Draw:</p> <p>60 W</p>	<p>Cavity Dimensions (L x W x H):</p> <p>4" x 4" x 2.25"</p>
	<p>AIRTRAC-MINI</p> <ul style="list-style-type: none"> · Low SWaP (Size, Weight, and Power) · Non-ITAR · Lower cost version and designed specifically for attritable applications and Group-1 UAS integration 	<p>Energy:</p> <p>> 15 mJ</p>	<p>Weight (w/ Electronics):</p> <p>< 100 g</p>	<p>Average Power Draw:</p> <p>24 W</p>	<p>Cavity Dimensions (L x W x H):</p> <p>2" x 1.5" x 1.5"</p>

Typical AIRTRAC-LD Configuration

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

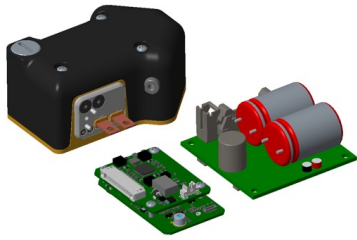
Telescope Options and Beam Divergence

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

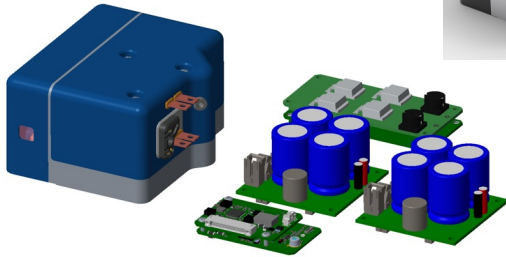
Component Name and Part Number	Qty Needed for System
Diode Driver 2 Capacitor Version	1
AIRTRAC Control Stack, P/N 101825-0001	1

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

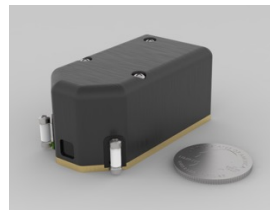
* custom telescopes or customer design can be considered

** 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
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* Customer designs available to support lower divergence

