



Arete's AIRTRAC-Mini Series provides a ruggedized laser with models capable of > 25 mJ and > 15 mJ pulse energy. The Low-SWaP design provides key laser pulse energy and pulse width capabilities over the full MIL-SPEC temperature range. The condensed size and full system weight of less than 100 grams establishes the AIRTRAC-Mini Series as a new miniature designator standard for lasers of this class.

Key Features

- New size standard of 2"x 1.5"x 1.5"
- Low-SWaP (Size, Weight, and Power)
- 3 times lighter than standard AIRTRAC-LP with same major capabilities
- Compact efficient athermal laser resonator
- Patented technology for increased efficiency and long life performance
- Reduced heat load
- No significant warm-up time
- Capable of continuous operation
- Fully sealed laser cavity





POC: | Airtrac.Sales@arete.com Business POC: Jay Rouse, (571) 255-4035 | jrouse@arete.com Areté | 9301 Corbin Ave. Northridge, CA 91324 | arete.com All Rights Reserved | Approved for Public Distribution | Copyright © 2024 Areté



PRODUCT IN DEVELOPMENT

AIRTRAC® - Mini Series



Potential application in Air Launched Effects

Parameter	Range			Comments
	Min	Typical	Max	
Weight	< 100 g			AIRTRAC-Mini Series with Electronics
Wavelength	1.064 um			
Output Energy per Pulse	> 15 mJ			Energy out of 15 mJ Model
	> 25 mJ			Energy out of 25 mJ Model
Pulse Width	10 ns to 25 ns			
Beam Divergence*	< 500 urad			Divergence out of 25 mJ Model
Beam Jitter	< 50 urad			Beam Jitter out of 25 mJ Model
Rep Rates	0 Hz to 25 Hz			
Pulse to Pulse Energy Stability	< 10% typ			
Secondary Pulses	None			
Average Standby/Arm Power	< 5 W			
Average Power Draw (total)	< 5 W	< 12.5 W	< 24 W	Values taken at 24 VDC and across pulse frequencies of 7Hz to 20Hz.
Peak Current	2.5 A	2.8 A	3.5 A	Values taken at 24 VDC and across pulse frequencies of 7Hz to 20Hz.
Operational Temp Range	-30C to +70C			Some variation in energy over this temperature range
Storage Temp Range	-40C to +85C			

^{*} beam divergence will very with magnification



