





Arete's AIRTRAC–E is a ruggedized laser with >30mJ pulse energy. The AIRTRAC–E provides key laser pulse energy and pulse width capabilities over the full MIL-SPEC temperature range. The condensed size and full system weighing less than 220 grams establishes the AIRTRAC–E as a new low weight standard for lasers of this class.

Key Features

- Compact efficient athermal laser resonator
- Low power
- Lightweight laser with key pulse energy and pulse width capabilities
- 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

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PRODUCT IN DEVELOPMENT

AIRTRAC®-E

Parameter	Range			Comments
	Min	Typical	Max	
Weight	220 g			AIRTRAC-E with Electronics
Wavelength	1.064 um			
Output Energy per Pulse	> 30mJ from 20-70C.			Data for colder temperatures available upon request
Pulse Width	10 ns to 20 ns			
Beam Divergence	400 urad to 600 urad			With 3x beam expander. Other beam expanders are available
Beam Jitter	< 50 urad			With 3x beam expander. Other options available
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)	7 W	16 W	36 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.
Enable to ARM Time	ls	2 s	3 s	
Operational Temp Range	-30C to +70C			Some variation in energy over this temperature range
Storage Temp Range	-40C to +85C			

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