Areté

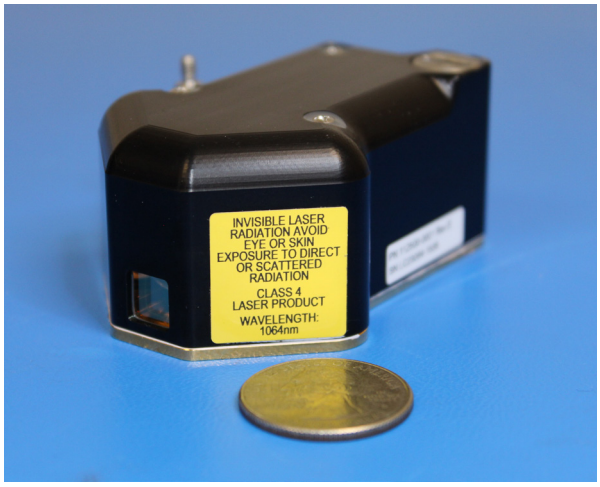
AIRTRAC®

LD Laser Designator

Areté's AIRTRAC-LD Laser Designator is a ruggedized laser with >50 mJ pulse energy. NATO STANAG 3733 capability in a very compact, lightweight and low power configuration. The athermal design provides high laser pulse energy over the full MIL-SPEC temperature range with low beam divergence and a full system weighing less than 320 grams. AIRTRAC-LD has established a new standard in size for lasers of this class.

Key Features

- Compact efficient athermal laser resonator
- Patented technology for increased efficiency and long life performance
- High energy with low beam divergence
- No significant warm-up time
- Reduced heat-load
- Capable of continuous operation
- Shock & vibration hardened
- Customer-specific packaging available



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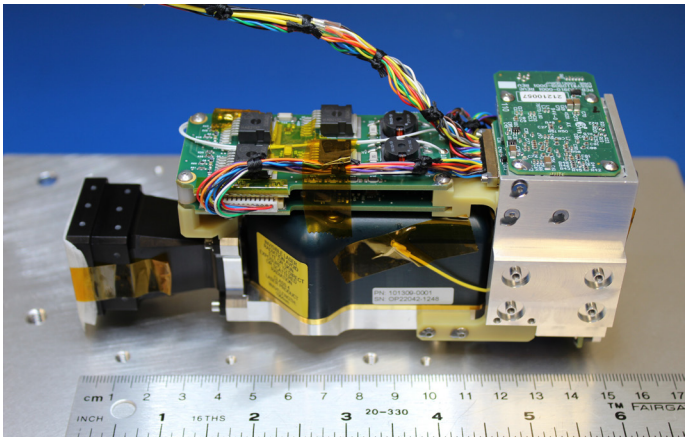

AIRTRAC-LD with example custom packaging configuration

AIRTRAC-LD integrated in Marine Corp NGHTS designator

Parameter	Range			Comments
	Min	Typical	Max	
Weight		320 g		112500 AIRTRAC LD Resonator with Electronics (without a telescope)
Wavelength		1.064 um		
Output Energy per Pulse	50 mJ	55 mJ	70 mJ	The AIRTRAC has a dual energy mode capability (Low Energy 35 mJ)
Pulse Width		10 ns to 25 ns		
Pulse Codes		STANAG 3733 I & II		
Beam Divergence		< 250 urad		With a 6X Telescope*
Beam Jitter		< 31 urad		< 1/10 beam divergence with a 6X telescope
Rep Rates		0 Hz to 25 Hz		
Pulse to Pulse Energy Stability		<10% typ		
Secondary Pulses		None		
Operational Voltage	18VDC	24VDC	32VDC	
Average Standby/Arm Power		< 5 W		
Average Power Draw (total)	10 W	25 W	42 W	Values taken at 24VDC and across pulse frequencies of 7Hz to 20Hz
Peak Current	2.5 A	2.8 A	3.5 A	Values taken at 24VDC and across pulse frequencies of 7Hz to 20Hz
Initialization Time	2 s	3 s	5 s	Power to Standby
Enable to ARM Time	1 s	2 s	3 s	Enable to ARM
Operational Temp Range		-30C to +60C		SW shutdown occurs at 80C
Storage Temp Range		-40C to +70C		
Mechanical Vibration		Complies with MIL-STD-810G		Testing performed with MIL-STD 810G-Change 1, Method 514.7, Category 24
Thermal Shock		Complies with MIL-STD-810G		Testing performed with MIL-STD 810G, Method 503.6, Procedure I-B

This product is listed under category XII(b) of the United States Munitions List. International Traffic In Arms Regulations (ITAR) requires a valid export license prior to technical or hardware shipments or transmissions of information.

* beam divergence will vary with the telescope magnification

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