



AIRTRAC®

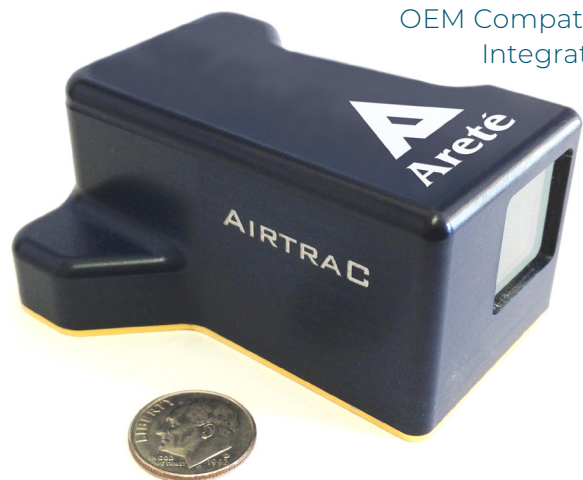
LD Laser  
Designator



Areté's AIRTRAC-LD Laser Designator is a ruggedized, high-shock laser with >50 mJ pulse energy. Full 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 1 lb. AIRTRAC-LD has established a new standard in size for lasers of this class.

## Key Features

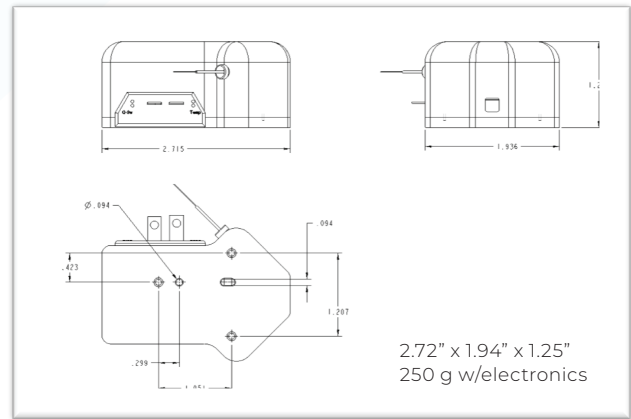
- Compact efficient athermal laser resonator
- Solid state technology for increased efficiency and long life performance
- High energy with low beam divergence
- No significant warm-up time
- Reduced heat-load: conduction or air cooled
- Continuous operation
- Shock & vibration hardened



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# AIRTRAC®-LD Laser Designator

AIRTRAC-LD  
with Beam  
Expander 110160



Parameter	Value	Comments
Weight	250 g	110140 AIRTRAC-LD resonator with electronics
Wavelength	1.06 $\mu\text{m}$	
Output Energy	>50 mJ	
Pulse Width	10-25 ns	
Pulse Codes	STANAG 3733 I&II	
Beam Divergence	<500 $\mu\text{rad}$	Contact Arete directly for telescope options
Beam Winder (Jitter)	$\leq 50 \mu\text{rad}$	< 1/10 beam divergence
Max Rep Rate	21 Hz	
Min Rep Rate	7 Hz	
Pulse Energy Stability	<5% typ	
Missing Pulses	<2 in 120 s	
Secondary Pulses	None	
Power (Voltage)	18-33 VDC	
Average Standby/Arm power	4 W	
Average Power Draw (total)	<30W	< 25 W for 50 mJ @ 20 Hz for most operation
Peak Current	<3.0 A	
Initialization Time	<5 s	Power on to standby
Arm Time	<100 ms	Standby to arm
Laser Start Up Exception	<1 s	
Timing Jitter	<10 ns	
Hot Operation	+70 C	SW shutdown occurs @ 71 C
Cold Storage	-46 C	
Cold Operation	-40 C	
Operating Altitude	$\leq 15,000 \text{ ft}$	
Non-Operating Altitude	$\leq 25,000 \text{ ft}$	

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.

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