SPECIFICATIONS

The High Energy Underwater Acoustic Generation Laser shall be a Q-switched Nd-doped YAG laser, producing at least 2 Joules at 532 nm wavelength. Specifications and required features are as follows:

1. Wavelength of 532 nm
2. Pulse Energy ≥ 2.0J
3. Pulse repetition rate of 10 Hz
4. Maximum full width half maximum (FWHM) pulse duration of 12 ns
5. Minimum 2D beam correlation to Gaussian (as measured by Ophir BeamStar laser profiling software a 1 meter distance from laser output) of 70%
6. Maximum peak-to-peak pulse energy fluctuations of ±4%
7. Maximum beam divergence (full angle at $1/e^2$ of peak) of 0.5 milliradians
8. Maximum beam pointing variation of ±30 microradians
9. Externally triggerable flashlamps
10. Flashlamp synchronization output
11. Externally triggerable Q-switch
12. Maximum pulse timing jitter with respect to external Q-switch trigger of 0.5 ns
13. US-based on-site manufacturer-provided service and maintenance must be available.
14. Installation and Demonstration at Government site.
15. Manual(s)
16. One-year standard commercial warranty