

We require 4 Distributed Feedback (DFB) Laser Diodes to be used as seed sources in a NASA airborne lidar system measuring atmospheric oxygen. The DFB laser diodes shall meet the following requirements:

Qty: Four (4) EA

- (1) Tunable Vacuum Wavelength shall be: 1262.3 to 1262.7 nm (1262.5 ± 0.2 nm).
- (2) Tunable Frequency Range shall be: 237422 to 237497 GHz (237459 ± 38 GHz).
- (3) Preferred die temperature for above frequency range shall be: 25 +/- 5 degrees C
- (4) Optical Power: ≥ 10 mW (CW). If optical power cannot be realized, quote highest power available.
- (5) Linewidth (-3db full-width): ≤ 2 MHz. If linewidth cannot be realized, quote lowest linewidth available.
- (6) 14-pin Butterfly Package (with integrated TEC, Thermistor and Photodiode).
- (7) Polarization Maintaining (PM) fiber with FC/APC connector (slow axis parallel to key). Fiber length shall be 1.0 +/- 0.5 meters (0.5 to 1.5 meters).
- (8) Internal Bias-T network is optional.
- (9) Optical Isolation: ≥ 30 db
- (10) Operating Case Temperature Range shall be: 0 to +60 degrees C.

Delivery: No Later Than five (5) weeks after receipt of order