

Dither LockIn Amplifier

Analog, easy to use

IMRA America presents the DLA: a rack-mounted, one channel, low-noise lock-in amplifier with an integrated synthesizer and slow PI servo for dither-lock applications.

Features

- Low noise ($< 3 \text{ nV Hz}^{-1/2}$)
- Integrated discrete-frequency synthesizer
- Integrated band pass filters (matchable)
- Phase offset (± 90 degrees)
- Integrated servo (slow PI, input & output offset)
- LCD monitor of lock-in or servo output
- Dual-stage input gain ($1-10^5$)

Compatible with Metrological & Spectroscopic Applications

- Coherent combination
- Delay line stabilization
- Fabry-Perot cavity locking
- SRS and CARS signal to noise enhancement



DLA Specifications	
Dither Frequency Choices	1, 2, 4, 8, 16, 32, 64, 100 kHz
Bandpass Filter Center Frequency Choices	All Pass, 1, 2, 4, 8, 16, 32, 64, 100 kHz
Output Signal (Levels ($\pm 3V$))	Lock-in, Servo, Sync (TTL) Lock-in Monitor, Servo Monitor
Phase Adjustment	Coarse: 90 degrees Fine: 90 degrees
Slow PI Corner Frequency Choices	30, 90, 220 Hz 1, 2.5, 5, 7.5, 14, 30 kHz
Time Constant Choices	1, 5, 10, 50, 100, 500 μ s 1, 5, 10, 100 ms
System Size	19", 2U rack-mountable, 7.5" long
Power Consumption	< 10 W



IMRA America, Inc.

1044 Woodridge Ave., Ann Arbor, MI 48105 Phone: 734.930.2560 Fax: 734.930.9957

combs@imra.com www.imra.com