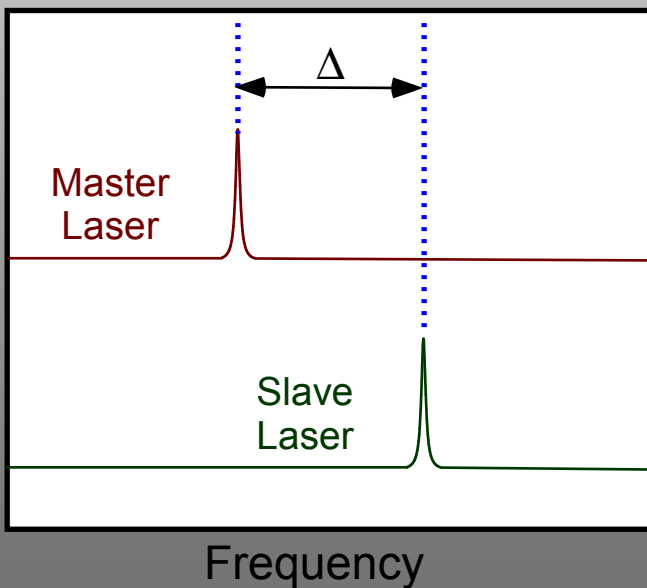


D2-135 Offset Phase Lock Servo & D2-150 Heterodyne Module



The D2-135 Offset Phase Lock Servo is designed to precisely control and quickly adjust the frequency detuning between two lasers. The D2-150 Heterodyne Module conveniently enables the overlap and fiber coupling of two laser beams. This mates with a fiber connector on the D2-135 providing an easy high-bandwidth input for the beat note. Alternatively, the fiber connector can be exchanged with an SMA to input an electronic beat-note. The D2-135 provides full servo-loop customization for optimization to most lasers.

Precisely Control Δ over > 8 GHz



Features Include:

Feed forward for fast frequency jumping

Arbitrary precision of offset via external reference

User-adjustable servo loop parameters

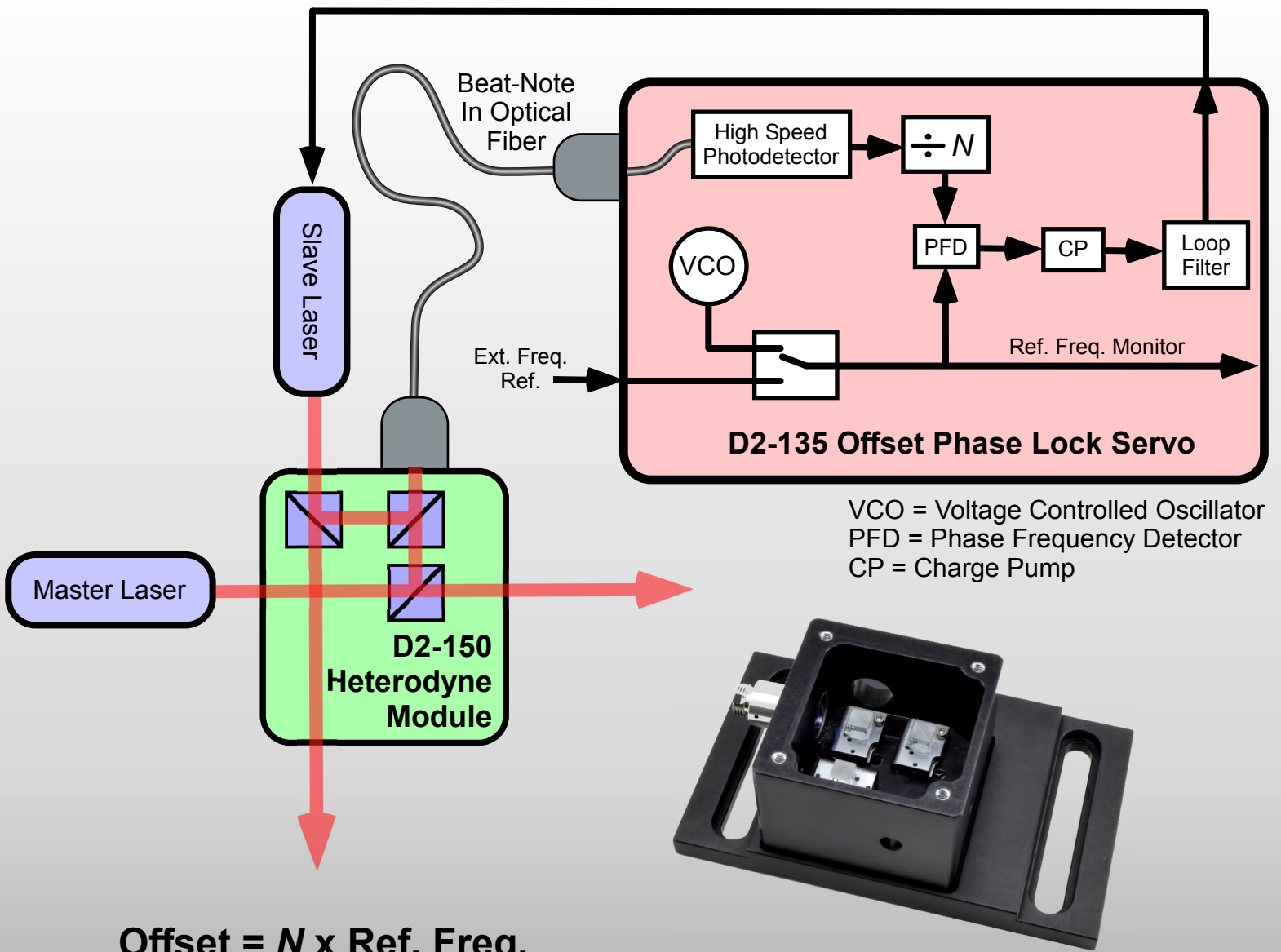
Computer control of dividers & gain sign

Internal ramp generator

Options for optical or electronic beat-note input

Vescent Photonics, Inc.
www.vescent.com
Denver CO
(303) 296-6766
sales@vescent.com

Vescent
Photonics



Offset = N x Ref. Freq.

Internal VCO Reference (High Mode)

	Offset Min	Offset Max
N=8	770	1700
N=16	1540	3400
N=32	3080	6800
N=64	6160	>8000

Internal VCO Reference (Low Mode)

	Offset Min	Offset Max
N=8	385	850
N=16	770	1700
N=32	1540	3400
N=64	3080	6800

External Reference: 30 – 240 MHz

	Offset Min	Offset Max
N=8	240	1920
N=16	480	3840
N=32	960	7680
N=64	1920	>8000

	Min	Max
Optical Power In	200uW	2mW
Electrical Power In	-10dBm	0dBm
Output Voltage	-10V	+10V
Noise Floor		TBD

The D2-135 is powered with an external power supply (D2-005) or user provided power via a breakout board (D2-001).