

BCB-2



DEVICE

Modulator Bias Control Board, Q+ Only

OVERVIEW

The Optilab BCB-2 is a compact bias control board designed to maintain the linear operating point of optical intensity modulators. Featuring a compact miniature design for OEM integration, the BCB-2 allows for a stable Quadrature point operation over long operating periods of time. With a USB 2.0 DC power and monitor interface standard, the BCB-2 unit is the ideal choice for industrial and OEM applications when paired with any of Optilab's wide variety of optical modulators, contact Optilab for more information.

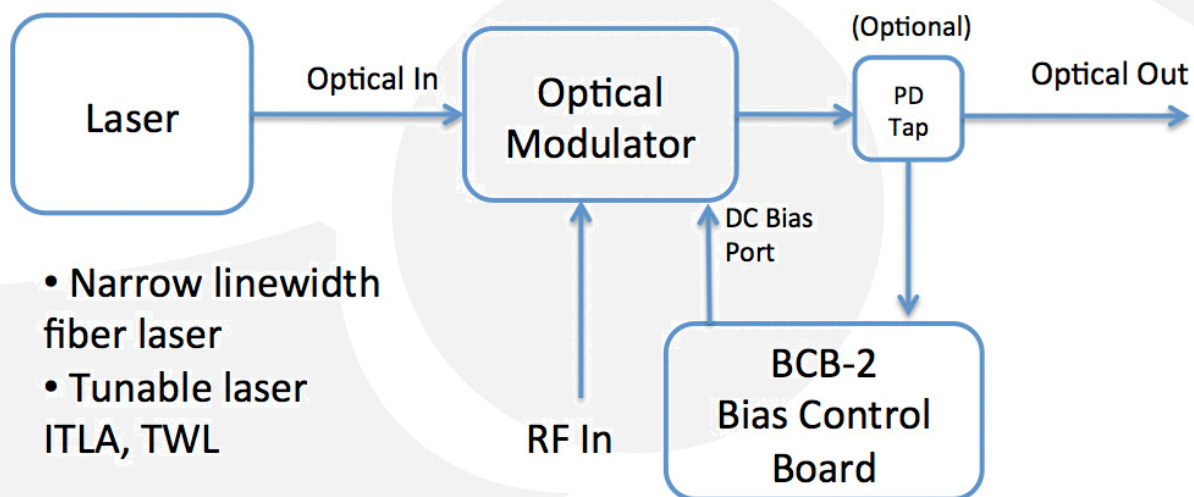
FEATURES

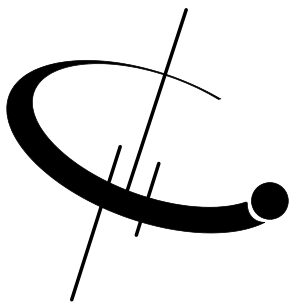
- Dedicated Q+ Bias Setting Mode
- Optional On-board Photodiode
- USB 2 Interface for Power and Monitoring
- 4-Pin Connector for PD Current In, DC Bias Out
- Compatible with all MZI Optical Modulators

USE IN

- RF/IF Signal Distribution
- Satellite Communication
- Optical Communications
- Analog Lightwave Modulation
- Full Bandwidth RFoF Transmission

FUNCTIONAL DIAGRAM





BCB-2

SPECIFICATIONS

GENERAL

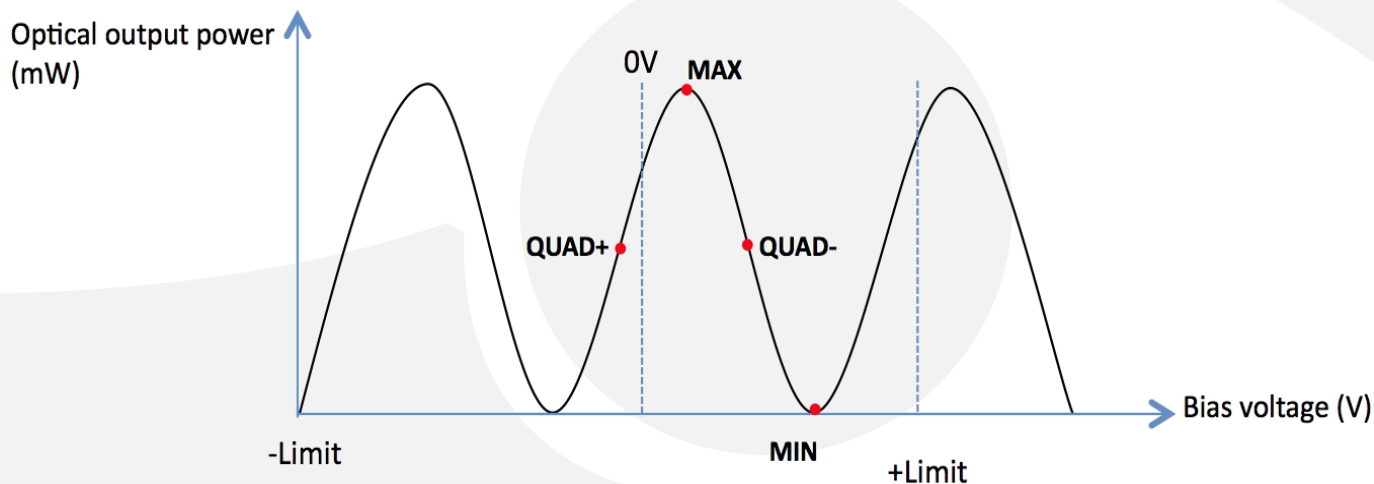
Modulator Type	Mach Zehnder Interferometer
Bias Control Principle	Small Signal Dithering
Bias Output Impedance	100 Ω
Bias Output Voltage	± 10 V
Modulator Voltage V_{PI} Range	3 - 8 V
Remote Monitor and Power	USB 2.0

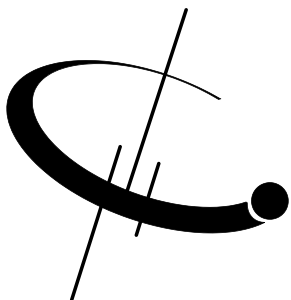
MECHANICAL

Operating Temperature (Standard)	-30°C to +70°C
Operating Temperature (Temp. Qual.)	-55°C to +80°C
Storage Temperature	-55°C to +90°C
Power Supply Requirements	5 V, 100 mA typ.
Alarm	LED DC Power status
Dimensions	132 mm x 26 mm x 8 mm

BIAS CONTROL MODE

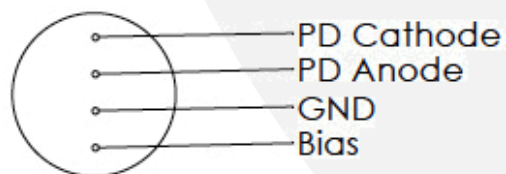
Mode	Operation Conditions	Modulation Format
Q+	Set to quadrature point of positive slope	Analog, NRZ





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MECHANICAL DRAWING



DETAIL A
SCALE 2 : 1

