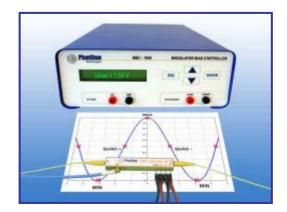
MBC-LN Lithium Niobate Modulator Bias Controller



DESCRIPTION

Photline MBC are a family of bias controllers specially designed to stabilize the working point of LiNb03 Mach-Zehnder modulators. MBC controllers use digital signal processing based on an original FFT principle that allows to easily change the dithering frequency. The modulator working point can be locked at Min, Max, Quad+, Quad- or set manually so as to adapt to a wide variety of applications. MBC controllers are available as benchtop units and OEM boards.



FEATURES

- Designed for LiNb03 modulators
- Min, Max, Quad+, Quad- or manual set point
- High sensitivity : < -30dBm
- Low dithering amplitude : $<1\% V\pi$
- FFT principle allows easy change of dithering frequency from 300 Hz to 1.8 kHz

APPLICATIONS

- Digital transmission : NRZ, RZ, ...
- Analog transmission
- Pulse generation
- Instrumentation

OPTIONS

- Monitoring photodiode
- Benchtop instrument
- 100 mm x 160 mm OEM board

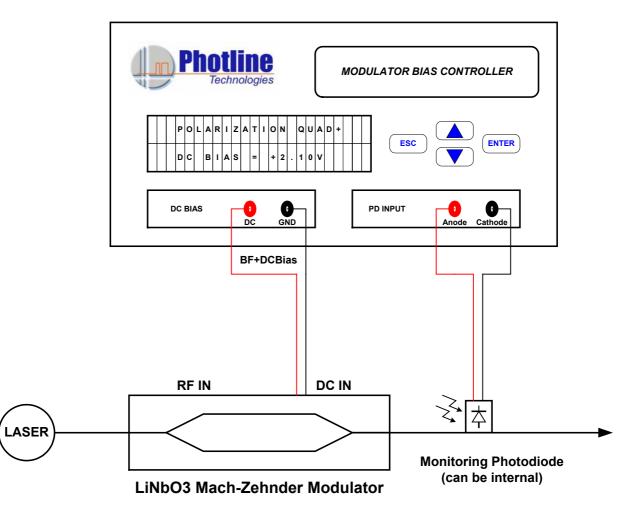




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WORKING CONFIGURATION





MBC-LN Lithium Niobate Modulator Bias Controller



| Electrical | |
|-----------------------|-------------------------------------|
| Working points | Quad +, Quad -, Min, Max, Manual |
| DC bias voltage range | -10 V to +10 V |
| Dither frequency | 300 Hz to 1800 Hz (10 Hz steps) |
| Dither amplitude | 50 mVp-p to 500 mVp-p (10 mV steps) |
| Display | Bias voltage |
| | Mode (Q+, Q-, Min, Max, Man) |
| | Dither frequency |
| | Dither amplitude |
| | Bias point hop* |
| Optical input power | |
| Interfaces | |
| Bias output | 2 mm jack |
| Photodiode input | 2 mm jack |
| Dimensions | |
| Case dimension | 71 x 12 x 7 mm3 |
| Weight | 2.5 kg – 5 pounds |
| Power supply | 110-240 V |

* in case bias voltage drifts out of range, MBC automatically search a new bias point and warns user of bias point hop by displaying an alarm message

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