



IQABC

Automatic Bias Controller

IQ Optimization Made Simple

KEY FEATURES

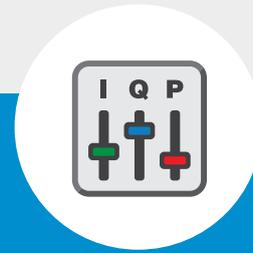
- Modulation Format Independent ABC Algorithm
- Independent Control of all DC Biases
- Compatible with OIF Standard IQ Modulators
- Accurate & Stable Tracking of Bias Drifts
- Easy to use Software


coherent
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complexity made simple.



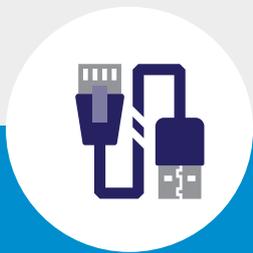
MODULATION FORMAT INDEPENDENT ABC ALGORITHM

The robust ABC algorithm works with any modulation formats for a truly automated operation



INDEPENDENT CONTROL OF ALL DC BIASES

Each of I, Q or Phase DC biases can be controlled independently in either automatic or manual mode



SUPERIOR CONNECTIVITY

You can control IQABC locally or remotely via USB or Ethernet. With its SCPI compatibility, the option is yours



COMPATIBLE WITH OIF STANDARD IQ MODULATORS

The external modulator adaptor board provides simple and quick connectivity to any IQ Modulator with OIF compatibility



ACCURATE & STABLE TRACKING OF BIAS DRIFTS

The advanced ABC algorithm constantly tracks any drift, so you get stable and repeatable results every time



EASY TO USE SOFTWARE

IQABC software controller provides access to all the functions in a clean, simple and intuitive graphical layout

Technical Specifications

Supported modulator types	Single & dual pol. IQ Mach Zehnder
Supported modulation formats	Any modulation format
Bias control options	Automatic locking and individual manual bias
Maximum bias voltage range	28 V
Number of bias control channels	6
Start up time until settled	< 3 minutes, < 1 minute typical
Quadrature error	Averaged mean < $\pm 0.3^\circ$, Standard deviation > 24 hours: < 2°
ABC impact on EVM	< 1%
Wavelength range PM fiber	1510 nm - 1610 nm
Wavelength range SM fiber	1260 nm - 1620 nm
Dither size vs Vpi*	max 5%, typical 2%
Max optical input power to ABC	+10 dBm
Optical insertion loss	< 0.5 dB
Optical power operating range	-5 dBm to +10 dBm
RF drive levels supported	0 to 1.9 Vpi
Manual bias control range:	± 13 V

Notes: Specifications are valid at 23 °C \pm 3 °C. *A small low frequency dither is applied to the biases as part of the control mechanism.

GENERAL SPECIFICATION

Dimensions (h) x (w) x (d)	115 x 222 x 332 mm 4.53 x 8.74 x 13.07 inches
Weight	4 kg 8.8 lbs
PC interface method	USB 2.0, Ethernet
Operating system requirement	Windows 7, 8 or 10 (32 or 64 bit)
Power supply	~100 - 240 V; 50/60 Hz; 60 W
Operating temperature range	5 °C to 45 °C 41 °F to 113 °F
Storage temperature range	-40 °C to 70 °C -40 °F to 158 °F

Product Warranty



All Coherent Solutions' products come with a standard 3 year warranty.

The IQABC's physical appearance is subject to change.

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To find out more, get in touch with us today

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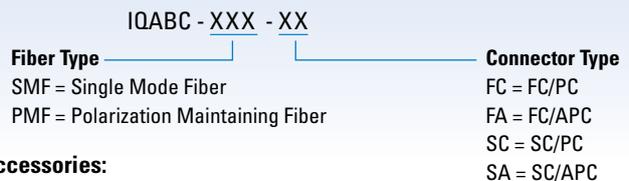
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Ordering Information

IQABC:



Accessories:

