



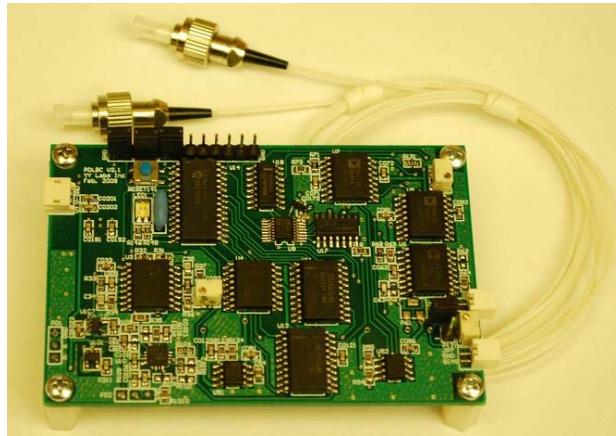
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## Precision Ditherless Bias Controller Specification (0113)

(Last updated on 2/17/09, Rev.2.0)

Precision Ditherless Bias Controller is an OEM version standalone device of bias control feedback loop. The most important feature of it is to use pilot tone mode to bring the modulator accurately at Quad position, then use ditherless mode to continue locking the modulator at that point. User can also disable to pilot tone, use the manual mode to lock the bias of the modulator or the device under control to other desired working point. The locking slope can be switched with a jumper on the board. When the drift of the modulator is out of the specified range, the unit will pull the bias back to the desired working point close to 0V. There are two photodiodes built in the board, an external reference voltage can also be applied when specified at order. There is a remote port for user to tune the Bias Controller remotely when it is set at manual mode.



Top View of the Precision Ditherless Bias Controller

Parameters	Min	Typ	Max	Unit
Input signal current	0.1x10 <sup>-3</sup>		0.1	mA
Input optical power	-30		-10	dBm
Locking Accuracy		1.6	2	Degree
DC Bias Voltage	-10		+10	V
Positive Power Supply	10	12	+15	V
Negative Power Supply	-10	-12	-15	V
Modulation Depth (During calibration or resetting only, it is off during normal operation)		6		%
Pilot Tone Frequency		1K		Hz
Positive supply current			120	mA
Negative supply current			90	mA
Operating temperature	0		70	C
Storage temperature	-40		80	C
Dimension	L3.3×W2.2×H0.5"			