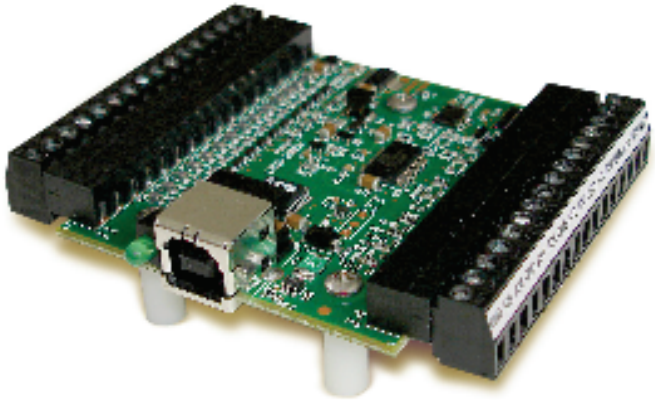
DATASHEET AND OPERATING GUIDE

USBKIT

USB Interface Kit



FEATURES AND BENEFITS

- Includes Digital-to-Analog (D/A) converter for remote setpoint control of laser driver or temperature controller
- Analog-to-Digital (A/D) converters are used to monitor actual laser diode current or temperature
- Auxiliary A/D can be configured as a single 14-bit differential input or two 13-bit single-ended inputs
- Software can control one laser diode driver, one temperature controller, an auxiliary monitor, and provides full graphing and datalogging
- Save multiple setups for easy repeatable experiments or manufacturing testing

COMPUTERIZE THE WAVELENGTH ADVANTAGE

Expand the capabilities of your Wavelength Electronics drivers and controllers with the USBKIT and QuickConnect™ software. The USBKIT provides convenient computer control of most Wavelength chassis mount controllers and PCB-mounted devices with evaluation boards.

The software provides an intuitive virtual control panel that allows you to leverage the low-noise, high-stability laser diode and temperature control capabilities of Wavelength's components to save time and money.

PLUG-IN CONVENIENCE FOR OEMS

Build the USBKIT into your OEM laser system and enjoy the convenience of closed-cover system calibration and troubleshooting—all you need is the USB cable that comes with the USBKIT.

The software is built on the Windows .NET framework so you can write your own code for a manufacturing test system, a field-calibration kit, or for laboratory applications.

CONTENTS

	PAGE
QuickConnect™ QUICK START	2
USBKIT FUNCTIONS AND COMPATIBILITY	2
PIN DESCRIPTIONS	3
SPECIFICATIONS	4
SAFETY INFORMATION	5
SOFTWARE INSTALLATION INSTRUCTIONS	6
OPERATING INSTRUCTIONS	8
ADDITIONAL TECHNICAL INFORMATION	18
TROUBLESHOOTING	22
MECHANICAL SPECIFICATIONS	23
CERTIFICATION AND WARRANTY	24

ORDERING INFORMATION

PART NO	DESCRIPTION
USBKIT	Customized National Instruments D/A card, plus QuickConnect™ software

RoHS Compliant

406-587-4910

www.teamWavelength.com

Applies to Product Revisions A-C

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WAVELENGTH ELECTRONICS

SPECIFICATIONS

PARAMETER	VALUE	UNIT	NOTE
Size	3.2 x 2.8 x 1.2	in	81.3 x 71.1 x 30.5 mm
Weight	2	oz	56 grams
Supply Voltage	USB Bus Powered		
USB Interface	Full Speed, Self-Powered USB 2.0		
Operating Temperature	0 to 55	ºC	
Storage Temperature	–40 to 85	ºC	
A/D Resolution	13 bits (x2) or 14 bits (x1)		(2x) Single-ended inputs or (1x) Differential input
D/A Resolution	12	bits	(x2) outputs available; for setpoint control of laser driver and temperature controller

COMPUTER SYSTEM REQUIREMENTS		
Operating System Compatibility (US English Edition)	x86 (32-bit)	x64 (64-bit)
Windows 7	X	X
Windows Vista	X	X
Windows XP SP3	X	
Installation Prerequisites **QuickConnect version 2.3.6 and earlier** (Available for free from Microsoft and National Instruments websites.)	.NET Framework 4.0 NI-DAQmx 9.6.x	
Installation Prerequisites **QuickConnect version 2.4.0 and later**	.NET Framework 4.0 NI-DAQmx 15.1.1f3	
Memory	256 MB Minimum	