



# USB-DT Mini Deuterium Tungsten Source

## Most Versatile Lamp We Offer

The USB-DT Deuterium Tungsten Light Source is our most versatile combination UV-VIS light source. There are several ways to use the USB-DT: as a stand-alone source, stacked atop the USB2000 or USB4000 Spectrometer via the USB-ADP-DT2 adapter, or connected to a spectrometer via a Breakout Box. Though the USB-DT can be stacked on top of the USB2000 or USB4000, it is not the kind of direct-attach source that eliminates fibers; the USB-DT requires fibers. This compact source is about the size of a deck of cards, provides stable, broadband output from 200-2000 nm, and requires a 5-volt wall transformer for power.

## Software Control

When the USB-DT is stacked with the USB2000 or USB4000 or used with an HR2000+, HR4000 or QE65000 and the Breakout Box, you can control the following lamp functions through software:

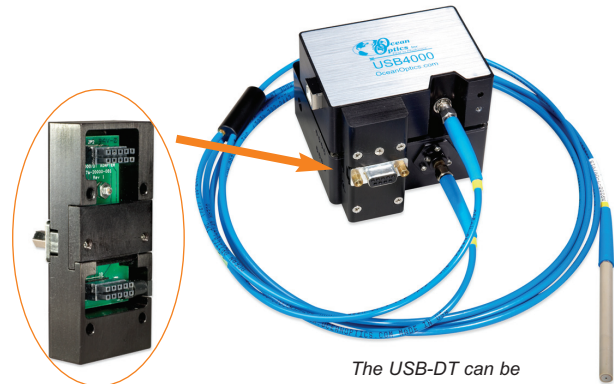
- adjusting the intensity of the tungsten source
- activating the internal shutter to block the light path
- controlling on/off switch of each source independently
- utilizing a low-power shutdown mode
- saving settings in memory

## Novel Deuterium Tungsten Halogen Sources

Our deuterium tungsten halogen sources combine the continuous spectrum of deuterium and tungsten halogen lamps in a single optical path. These combined-spectrum sources produce stable, continuous UV-VIS output that make them ideal for applications such as absorbance spectroscopy.



The USB-DT has a 15-pin connector for interfacing to the spectrometer.



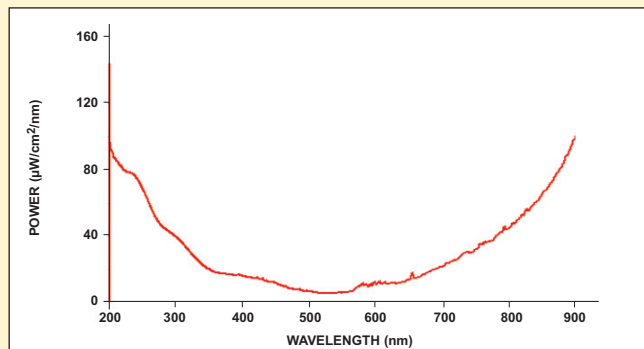
USB-ADP-DT2 Connector.

The USB-DT can be set up in a variety of ways. It can be stacked with the USB4000 via the USB-ADP-DT2 connector (above), or used as a stand-alone component with an Ocean Optics spectrometer.



Spectrometer With USB-DT	Directly Stackable	Software Control of all USB-DT Functions
USB2000	Yes, with USB-ADP-DT2	Yes, when stacked atop the USB2000 with a USB-ADP-DT2
USB4000	Yes, with USB-ADP-DT2	Yes, when stacked atop the USB4000 with a USB-ADP-DT2
HR2000	No	No
HR2000+	No	Yes, when used with HR4-BREAKOUT
HR4000	No	Yes, when used with HR4-BREAKOUT
QE65000	No	Yes, when used with HR4-BREAKOUT

### USB-DT Spectral Output



## Specifications

Dimensions:	81 mm x 90 mm x 37 mm
Weight:	260 g
Wavelength range:	200-2000 nm
Power consumption:	1.5 A @ 5 VDC
Output:	see Spectral Output graph at left
Stability:	0.5% peak-to-peak (after warm-up)
Time to stable output:	15 minutes
Bulb life:	800 hours for deuterium; 2,000 hours for tungsten
Connector:	SMA 905

