

Архангельск (8182)63-90-72  
 Астана (7172)727-132  
 Астрахань (8512)99-46-04  
 Барнаул (3852)73-04-60  
 Белгород (4722)40-23-64  
 Брянск (4832)59-03-52  
 Владивосток (423)249-28-31  
 Волгоград (844)278-03-48  
 Вологда (8172)26-41-59  
 Воронеж (473)204-51-73  
 Екатеринбург (343)384-55-89  
 Иваново (4932)77-34-06

Ижевск (3412)26-03-58  
 Иркутск (395)279-98-46  
 Казань (843)206-01-48  
 Калининград (4012)72-03-81  
 Калуга (4842)92-23-67  
 Кемерово (3842)65-04-62  
 Киров (8332)68-02-04  
 Краснодар (861)203-40-90  
 Красноярск (391)204-63-61  
 Курск (4712)77-13-04  
 Липецк (4742)52-20-81  
 Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13  
 Москва (495)268-04-70  
 Мурманск (8152)59-64-93  
 Набережные Челны (8552)20-53-41  
 Нижний Новгород (831)429-08-12  
 Новокузнецк (3843)20-46-81  
 Новосибирск (383)227-86-73  
 Омск (3812)21-46-40  
 Орел (4862)44-53-42  
 Оренбург (3532)37-68-04  
 Пенза (8412)22-31-16  
 Россия (495)268-04-70

Пермь (342)205-81-47  
 Ростов-на-Дону (863)308-18-15  
 Рязань (4912)46-61-64  
 Самара (846)206-03-16  
 Санкт-Петербург (812)309-46-40  
 Саратов (845)249-38-78  
 Севастополь (8692)22-31-93  
 Симферополь (3652)67-13-56  
 Смоленск (4812)29-41-54  
 Сочи (862)225-72-31  
 Ставрополь (8652)20-65-13  
 Казахстан (772)734-952-31

Сургут (3462)77-98-35  
 Тверь (4822)63-31-35  
 Томск (3822)98-41-53  
 Тула (4872)74-02-29  
 Тюмень (3452)66-21-18  
 Ульяновск (8422)24-23-59  
 Уфа (347)229-48-12  
 Хабаровск (4212)92-98-04  
 Челябинск (351)202-03-61  
 Череповец (8202)49-02-64  
 Ярославль (4852)69-52-93

<https://toupTek.nt-rt.ru/> || [tuo@nt-rt.ru](mailto:tuo@nt-rt.ru)



TPDH-2000



## Specification

### TPDH-2000

The **TPDH-2000 Deuterium Tungsten Halogen Light Source** combines the continuous spectrum of deuterium and tungsten halogen light sources in a single optical path.

The combined-spectrum light source produces a powerful, stable output from 215-2500 nm. In addition, deep-UV versions of the light source are available, providing a 190-2500 nm wavelength range.

### Options and Accessories

Integrated shutters are also available with the TPDH-2000 and can be driven either by a switch or by a TTL signal. Another option is to include a filter holder with the system, which accepts filters up to 4 mm in thickness and as large as 25-mm square or 20-mm round in diameter. All versions of the TPDH-2000 have an SMA 905 Connector for easy coupling to our spectrometers and accessories via optical fiber, and a safety shutter for blocking the light when the fiber is not attached.

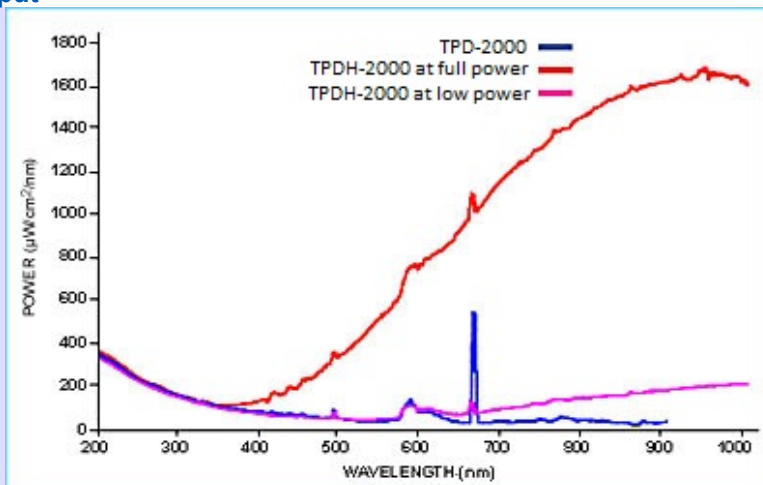
### Adjustable Power

All versions of the TPDH-2000 have a potentiometer on the back of the light source to balance the light level between the deuterium and tungsten halogen light sources. This potentiometer allows you to adjust the optical power of the tungsten halogen light from 10-100%.

### Optical Fibers

We recommend using our solarization-resistant optical fibers with all versions of the TPDH-2000.

### TPDH2000 Spectral Output



This spectral output graph shows the output of the TPDH-2000 (red) at full power and the TPDH-2000 with the tungsten halogen at low power (pink), TPDH-2000 (blue). The height of the deuterium atomic emission line depends on the optical resolution of the spectrometer.

### TPDH-2000 Deuterium Light Source Specifications

Dimensions:	150 mm x 135 mm x 319 mm
Weight:	3.5 kg

Power consumption:	25 W (deuterium); 20 W (tungsten halogen)
Wavelength range:	190-2500 nm (deep-UV deuterium and tungsten halogen bulbs) 215-2500 nm (standard deuterium and tungsten halogen bulbs)
Humidity:	5-95% without condensation at 40 °C
Lamp current:	Operating 85 V/0.3A
Lamp lifetime:	1,000 hours
Lamp voltage:	Ignition 580 V @20°C
Current voltage drift:	<0.01% per hour
Current voltage stability:	<5 x 10 <sup>-6</sup> peak-to-peak (0.1-10.0 Hz)
Operating temperature:	5 °C - 35 °C
Power requirements:	85-264 V 50/60 Hz
Radiation characteristic:	Aperture 0.5 mm, numerical aperture 26° (13°); focused Total power: 100 W
Power consumption:	Approximately 78VA
Warm-up time:	40 minutes (deuterium); 20 minutes (tungsten halogen)
Markings:	CE; VDI/VDE 0160; EN 61010

Архангельск (8182)63-90-72  
Астана (7172)727-132  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89  
Иваново (4932)77-34-06

Ижевск (3412)26-03-58  
Иркутск (395)279-98-46  
Казань (843)206-01-48  
Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Липецк (4742)52-20-81  
Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41  
Нижегород (831)429-08-12  
Новокузнецк (3843)20-46-81  
Новосибирск (383)227-86-73  
Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Россия (495)268-04-70

Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Севастополь (8692)22-31-93  
Симферополь (3652)67-13-56  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Казахстан (772)734-952-31

Сургут (3462)77-98-35  
Тверь (4822)63-31-35  
Томск (3822)98-41-53  
Тула (4872)74-02-29  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Ярославль (4852)69-52-93

<https://toupstek.nt-rt.ru/> || [tuo@nt-rt.ru](mailto:tuo@nt-rt.ru)