

## LDS1212 - February 22, 2018

Item # LDS1212 was discontinued on February 22, 2018. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

### POWER SUPPLIES

- ▶ Output Voltages Ranging from 5 VDC to 15 VDC
- ▶ Location-Specific Power Cord or Adapter Included



**CPS1**  
5 VDC Battery Pack for  
CPS Laser Diodes



**KCH601**  
USB Controller Hub and  
Power Supply for Six K-  
Cube or T-Cube



**LDS9**  
9 VDC Regulated Power  
Supply



**KPS101**  
15 V Power Supply for One K-  
Cube or T-Cube



**DS5**  
5 VDC, 2 A Power Supply with USB  
Type-A Port

### OVERVIEW

Thorlabs offers a variety of power supplies with output voltages ranging from 5 VDC to 15 VDC.

Power Supply Compatibility											
Item #	LDS5 LDS5-EC	CPS1	DS5	LDS9 LDS9-EC	LDS1212	DS15	KPS101	TPS101	TPS002	KCH301	KCH601
<b>Output Voltage</b>	5 VDC			9 VDC	±12 VDC	15 VDC	15 VDC	5 VDC	±15 VDC / 5 VDC	15 VDC	
<b>Maximum Current</b>	330 mA	2 A		220 mA	250 mA	1.3 A	2.4 A	2.0 A	4 A	10 A	
<b>Connector Type</b>	2.5 mm Phono Plug	2.5 mm Phono Plug & USB	USB Type-A Female	2.5 mm Phono Plug	LUMBERG RSMV3- 657/2M Male Connector (3 Pins)	Mini-XLR	1.3 mm Jack Plug	2.1 mm Jack Plug	8-Pin Mini Din Plug (2 Places)	26 Way 1.27 mm Pitch, ERNI Connector (6 Places)	
			DXM20AF, LCC2415-VIS(M),	DET High-	PDA and PDB Amplified Photodetectors, PMM Photomultiplier	Nanosecond	KDC101, KST101, LEDD1B,	TLS001- 635,	KPZ101, TLD001,		

Compatible Products	CPS Laser Modules	Any Product Requiring 5 V Power via USB	Speed Photodetector	Modules, APD Avalanche Photodetectors, and Dichroic Atomic Vapor Spectroscopy Systems	Pulsed Laser Systems	TBD001, TIA60, and TSC001	TLS001-1550, and MTDEVAL <sup>a</sup>	TNA001/IR, TPA101, and TSG001	All K-Cubes and T-Cubes
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- a. This previous-generation evaluation board for MTD415xE TEC drivers is no longer offered by Thorlabs.

## 5 VDC Regulated Power Supply

- ▶ Compatible with CPS Laser Modules
- ▶ 5 VDC Power Output
- ▶ 6 ft (183 cm) Cable with 2.5 mm Phono Plug

The LDS5 is a 5 VDC power supply that is ideal for use with our CPS laser diode modules. A 6 ft (183 cm) cable with a 2.5 mm phono plug extends from the body of the power supply for connection to a CPS module.

The power supply has a selectable line voltage of 115 or 230 VAC, which is controlled by a switch near the power switch. A 120 VAC power cable is included with the LDS5, while the LDS5-EC comes with a 230 VAC power cable. To order this item with a different power cable, please contact tech support.

Part Number	Description	Price	Availability
LDS5-EC	5 VDC Regulated Power Supply, 2.5 mm Phono Plug, 230 VAC	\$86.96	Today
LDS5	5 VDC Regulated Power Supply, 2.5 mm Phono Plug, 120 VAC	\$86.96	Today

## 5 VDC External Battery Pack

- ▶ Portable USB Battery Pack with 5 VDC Output
- ▶ Compatible with CPS Laser Modules
- ▶ 10 000 mAh Capacity

For orders of more than 10 pieces, please contact us directly at:

[sales-TQE@thorlabs.com](mailto:sales-TQE@thorlabs.com)

Thorlabs offers the CPS1 Battery Pack for powering our CPS laser diode modules and other USB-powered devices. The CPS1 battery pack outputs 5 V and offers 10 000 mAh capacity. A fully charged CPS1 battery pack can power any CPS laser module for at least 36 hours of continuous operation. The pack includes a USB-to-Micro-USB cable for charging and a custom USB-to-Phono cable for powering the CPS laser diode module. To activate the battery, simply push the power button once. The pack may be charged using standard 5 V USB chargers for portable devices or using a computer USB port. While the battery pack is charging, it can still supply power to an attached laser module.

The CPS1 Battery Pack also includes an LED flashlight adjacent to the micro-USB port. The flashlight is activated and deactivated by holding the power for two seconds.

When connecting the CPS Laser Diode Module, the module and adapter should be connected first. Then the adapter cable should be plugged into the isolated power supply to avoid a short circuit in the phono jack. Please note that the USB adapter included with this battery pack is not intended to be used with power supplies that are not current-limited or isolated from ground, such as some computers or laptops.

**Please note:** Due to shipping restrictions for lithium ion cells, the CPS1 battery pack is not available for purchase in certain countries. In countries where it is available, the battery pack must be shipped separately using specifically regulated shipping methods and may require special shipping and handling charges. Our sales team is available to answer additional questions concerning the shipment of this battery pack.

Close

Albania	East Timor	Macau	Romania
Algeria	Ecuador	Macedonia	Russia
American Samoa	Egypt	Madagascar	Rwanda
Angola	Equatorial Guinea	Malawi	Saint Martin

Argentina	Eritrea	Maldives, Republic of	Samoa
Armenia	Estonia	Mali	Saudi Arabia
Azerbaijan	Ethiopia	Malta	Senegal
Bangladesh	Faeroe Islands	Marshall Islands	Serbia
Belarus	Fiji	Martinique	Serbia-Montenegro
Belize	French Guiana	Mauritania	Serbia-Montenegro Old
Benin	French Polynesia	Mauritius	Seychelles
Bermuda	Gabon	Micronesia	Sierra Leone
Bhutan	Gambia	Moldova	Solomon Islands
Bolivia	Georgia, Republic of	Mongolia	Somalia
Bonaire, Sint Eustatius and Saba	Ghana	Montenegro	South Africa, Republic of
Bosnia-Herzegovina	Gibraltar	Montserrat	Sri Lanka
Botswana	Greenland	Morocco	Sudan
British Virgin Islands	Guinea	Mozambique	Suriname
Brunei	Guinea Bissau	Myanmar	Swaziland
Bulgaria	Honduras	Namibia	Tanzania
Burkina Faso	Iceland	Nepal	Togo
Burundi	Iran	New Caledonia	Tonga
Cambodia	Iraq	New Zealand	Tunisia
Cameroon	Ivory Coast	Nicaragua	Turkey
Cape Verde	Jordan	Niger	Turkmenistan, Republic of
Central African Republic	Kazakhstan	Nigeria	Uganda
Chad	Kenya	Northern Mariana Islands	Ukraine
Chile	Kyrgystan	Oman	Uruguay
Congo	Laos	Pakistan	Uzbekistan
Congo, Dem Rep of	Latvia	Palau	Vanuatu
Cook Islands	Lebanon	Palestine Autonomous	Venezuela
Curacao	Lesotho	Papua New Guinea	Wallis & Futuna Islands
Cyprus	Liberia	Paraguay	Zambia
Djibouti	Libya Reunion	Peru	Zimbabwe

This battery cannot be shipped to certain zip codes in and around Perth, Australia.

Part Number	Description	Price	Availability
CPS1	Customer Inspired!5 VDC Battery Pack for CPS Laser Diodes, 10 000 mAh	\$35.45	Today

## 5 VDC Regulated Power Supply

- ▶ 5 VDC Regulated Power Supply
- ▶ USB Type-A Port
- ▶ Compatible with Our DXM20AF Ultrafast Detector

The DS5 is a 5 V, 2 A regulated power supply with a USB 2.0 Type-A female port. It can be used with any USB-compatible device that accepts a 5 VDC output, and is directly compatible with our DXM20AF ultrafast fiber optic detector when used with the USB-AB-72 USB cable (sold separately). In addition to the USB-AB-72, we also offer other USB 2.0 cables. A region-specific adapter plug is shipped with the DS5 power supply unit based on your location.



[Click for Details Region-Specific Adapters for DS5](#)

Part Number	Description	Price	Availability
DS5	5 VDC, 2 A Regulated Power Supply with USB Type-A Port, 100/240 VAC	\$20.00	Today
USB-AB-72	USB 2.0 Type-A to Mini-B Cable, 72" (1.83 m) Long	\$8.36	Today

## 9 VDC Regulated Power Supply

- ▶ Compatible with DET High-Speed Photodetectors

- ▶ 9 VDC Power Output
- ▶ 6 ft (183 cm) Cable with 2.5 mm Phono Plug

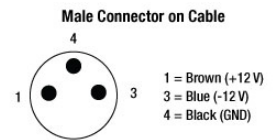
The LDS9 is a 9 VDC power supply that is ideal for use with our DET High-Speed Photodetectors. A 6 ft (183 cm) cable with a 2.5 mm phono plug extends from the body of the power supply for connection to a DET1A adapter or a 2.5 mm phono power socket.

The LDS9 power supply has a line voltage of 115 VAC, while the LDS9-EC has a line voltage of 230 VAC. A 120 VAC power cable is included with the LDS9 and the LDS9-EC comes with a 230 VAC power cable. To order this item with a different power cable, please contact tech support.

Part Number	Description	Price	Availability
LDS9-EC	9 VDC Regulated Power Supply, 2.5 mm Phono Plug, 230 VAC	\$85.94	Today
LDS9	9 VDC Regulated Power Supply, 2.5 mm Phono Plug, 120 VAC	\$85.94	Today

## 12 VDC Regulated Power Supply

- ▶ Compatible with PDA, PDB, PMM, and APD Photodetectors, and Dichroic Atomic Vapor Spectroscopy System
- ▶ ±12 VDC Power Output
- ▶ 6.6 ft (200 cm) Cable with LUMBERG RSMV3-657/2M Male Connector

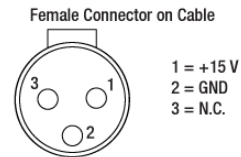


The LDS1212 is a ±12 VDC regulated linear power supply specifically for use with our PDA and PDB amplified photodetectors, our PMM photomultiplier modules, our APD avalanche photodetectors, and our dichroic atomic vapor spectroscopy systems. This regulated power supply incorporates a current limit, enabling short circuit and overload protection; an on/off switch with LED indicator; and switchable AC input voltage (115 or 230 VAC). The 2 m (6.6 ft) long cord has three pins: one for ground, one for +12 V and one for -12 V (see diagram to the right). A USA specific power cord is provided with the LDS1212.

Part Number	Description	Price	Availability
LDS1212	±12 VDC Regulated Linear Power Supply, 6 W, 115/230 VAC	\$80.33	Lead Time

## 15 VDC Regulated Power Supply

- ▶ 15 VDC Regulated Power Supply
- ▶ Mini-XLR Connector
- ▶ Compatible with Our Nanosecond Pulsed Laser Systems



[Click for Details Region-Specific Adapters for DS15](#)

The DS15 is a 15 V, 1.2 A regulated power supply with a 1.53 m (60.24") long cable and a Mini-XLR connector. It is suitable for any Mini-XLR-compatible device that requires a 15 VDC output, and is directly compatible with our nanosecond pulsed laser systems. A region-specific adapter plug is shipped with the DS15 power supply based on your location.

Part Number	Description	Price	Availability
DS15	15 VDC, 1.2 A Regulated Power Supply with Mini-XLR Connector, 100/240 VAC	\$45.00	Today

## K-Cube and T-Cube Power Supplies

- ▶ Individual Power Supplies for One K-Cube or T-Cube
- ▶ Power Supply for Two K-Cubes or T-Cubes



The KPS101 and TPS101 offer a simple power supply for individual K-Cubes or T-Cubes, while the TPS002 supplies power for one or two K-Cubes or T-Cubes. The cubes need to be hooked up individually to a computer via a USB cable to use them with the motion control

software.

A region-specific adapter plug is shipped with the power supply unit based on your location. The adapter plugs for the KPS101 are shown to the right.

[Click for Details Region-Specific Adapters for KPS101](#)

Part Number	Description	Price	Availability
KPS101	15 V, 2.4 A Power Supply Unit for One K-Cube or T-Cube	\$33.33	Today
TPS101	5 V, 2.0 A Power Supply Unit for One Laser Source T-Cube	\$37.33	Today
TPS002	±15 V/5 V Power Supply Unit for up to Two K-Cubes or T-Cubes	\$110.16	Today

## USB Controller Hubs for K-Cubes and T-Cubes



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- ▶ USB Controller Hubs for up to Three or Six K-Cubes or T-Cubes
- ▶ Provide Power and Communication with a Single USB Cable and a Single Power Connection
- ▶ Adapter Plate Connects T-Cube to Hub

These USB Controller Hubs have been designed specifically with multiple K-Cube and T-Cube operation in mind. The hub vastly reduces the number of USB and power cables required when operating multiple K-Cubes or T-Cubes. Furthermore, a USB output connector can be connected to the USB input on another unit, allowing multiple Controller Hubs to be connected together while still only using a single USB cable from the host control PC.

The hub draws a maximum current of 10 A; please verify that the cubes being used do not require a total current of more than 10 A.

The KCH301 and KCH601 Controller Hubs are compatible with all K-Cube and T-Cube modules. A KAP101 or KAP102 Adapter Plate (sold separately) is required for each T-Cube to operate on the controller hub. The KAP101 is designed to adapt 60 mm wide T-Cubes to the hubs, while the KAP102 is designed to adapt 120 mm wide T-Cubes to the hubs.

For more information on the USB Controller Hubs, see the full web presentation.



[Click to Enlarge](#)  
KCH301 USB Controller Hub with Installed K-Cube and T-Cube Modules (T-Cube is Shown on a KAP101 Adapter)

Part Number	Description	Price	Availability
KCH301	USB Controller Hub and Power Supply for Three K-Cubes or T-Cubes	\$494.70	Today
KCH601	USB Controller Hub and Power Supply for Six K-Cubes or T-Cubes	\$598.74	Today
KAP101	Adapter Plate for KCH Series Hubs and 60 mm Wide T-Cubes	\$57.38	Today
KAP102	Adapter Plate for KCH Series Hubs and 120 mm Wide T-Cubes	\$62.48	Today