

TPS101 - May 11, 2023

Item # TPS101 was discontinued on May 11, 2023. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

K-CUBE™ AND T-CUBE™ POWER SUPPLY OPTIONS

- External Power Supplies for K-Cube™ and T-Cube™ Controllers
- USB Controller Hubs Provide Power and Communication for K-Cubes and T-Cubes



OVER VIEW

Features

- Power Supplies for Individual K-Cubes™ and T-Cubes™
- Power Supply for Up to Two K-Cubes and T-Cubes
- USB Controller Hubs Combine Power and Communications for Up to Three or Six K-Cubes or T-Cubes
- Adapter Plates for Using T-Cubes with USB Controller Hubs



The KCH601 USB Controller Hub with installed K-Cube and T-Cube modules. One KAP101 adapter plate is used for the T-Cube on the hub.

Please note that with the exception of the USB Controller Hubs, each power supply is not compatible with all K-Cubes and T-Cubes. Please verify that the power supply can provide the required voltage and amperage for the K-Cubes and T-Cubes being used. See below for more details on choosing the correct option.

K-Cube™ Motion Control Modules
Brushed DC Servo Motor Controller
Brushless DC Servo Motor Controller
Fiber Alignment Controllers
Four-Channel Piezo Inertia Actuator Controller
PSD Auto Aligner
Single-Channel Piezo Controller
Single-Channel Strain Gauge Reader
Solenoid Controller
Stepper Motor Controller
Compact Light Source & Driver Modules
Laser Sources
Laser Diode Driver
High Power LED Driver
Compact Temperature Control Module
Temperature Controller

Power Supply Compatibility				
Item #	Max Number of Modules Powered	Motion Control Modules	Light Source & Driver Modules	Temperature Control Modules
KPS201	One	KBD101, KDC101, KIM101, KSC101, and KST101	KLS635, KLS1550, and LEDD1B	-
TPS101	One	-	-	TTC001
TPS002	Two	KNA-VIS <sup>a</sup> , KNA-IR <sup>a</sup> , KPZ101, KPA101, and KSG101	KLD101	-
KCH301	Three	Compatible with All Variants <sup>b</sup>		
KCH601	Six			

- a. The TPS002 can only support one KNA-VIS or KNA-IR controller and should not be used to power any additional units due to current limitations.
- b. A KAP101 or KAP102 Adapter Plate is required to use a T-Cube with the KCH301 or KCH601.

## K-Cube™ and T-Cube™ Power Supplies



- ▶ Individual Power Supplies for One K-Cube or T-Cube
  - ▶ KPS201: For K-Cubes or T-Cubes with 3.5 mm Jacks
  - ▶ TPS101: Compatible with TTC001 Module
- ▶ Power Supply for up to Two K-Cubes or T-Cubes
  - ▶ TPS002: For K-Cubes or T-Cubes with Mini-DIN Input

Input Specifications	
Item #	Mains Voltage Requirements
KPS201	100 - 240 V, 1 A Max, 47 - 63 Hz
TPS101	90 - 264 V, 0.4 A Max, 47 - 63 Hz
TPS002	90 - 264 V, 0.8 A Max, 47 - 63 Hz



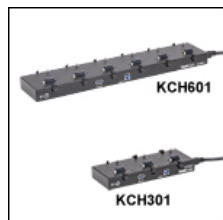
Region-Specific Adapters for KPS201

The KPS201 and TPS101 offer a simple power supply for select individual K-Cubes or T-Cubes, while the TPS002 supplies power for one or two select K-Cubes or T-Cubes. Please refer to the compatibility information in the list or table above. The TPS002 can only support one KNA-VIS or KNA-IR controller and should not be used to power any additional units due to potentially exceeding the current limit.

The cubes need to be hooked up individually to a computer via a USB cable to use them with the motion control software. One region-specific plug adapter, selectable at checkout, is included with each power supply. The adapter plugs for the KPS201 are shown to the right.

Part Number	Description	Price	Availability
KPS201	15 V, 2.66 A Power Supply Unit with 3.5 mm Jack Connector for One K- or T-Cube	\$39.54	Today
TPS101	5 V, 2.0 A Power Supply Unit for One TTC001 Module	\$42.62	7-10 Days
TPS002	±15 V/5 V Power Supply Unit with Mini-DIN Connectors for up to Two K- or T-Cubes	\$125.77	Today

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



- ▶ 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

Input Specifications	
Item #	Mains Voltage Requirements
KCH301 KCH601	80 - 264 V, 1.8 A Max, 47 - 63 Hz



KCH301 USB Controller Hub with Installed K-Cube and T-Cube Modules (T-Cube is Shown on a KAP101 Adapter)

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.

Part Number	Description	Price	Availability
KCH301	USB Controller Hub and Power Supply for Three K-Cubes or T-Cubes	\$586.89	Today
KCH601	USB Controller Hub and Power Supply for Six K-Cubes or T-Cubes	\$710.31	Today
KAP101	Adapter Plate for KCH Series Hubs and 60 mm Wide T-Cubes	\$68.07	Today
KAP102	Adapter Plate for KCH Series Hubs and 120 mm Wide T-Cubes	\$74.12	Today



**Location-Specific Adapter Provided**