





















## **UTILITY** PRODUCT CATALOG

RUGGED. RELIABLE. RESPONSIVE.™

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Lind Electronics is part of the Gamber-Johnson tree. Gamber-Johnson is a global name known for providing industry-leading mounting solutions to support many, diverse industries, most notably the public sector, material handling, logistics, and enterprise. The GJ portfolio of product offerings has grown with strategic additions to our family of brands to support a broader offering and full service mounting, powering and carrying solution.







From humble beginnings, our passion for innovation propelled us to the forefront of the industry, earning Lind Electronics a reputation for reliability and durability.

### YOUR TRUSTED MOBILE POWER SPECIALISTS

In the heart of innovation's crucible, Lind Electronics was forged—a beacon of power and precision amidst the dynamic landscape of mobile technology. Founded in 1975 by the visionary Leroy Lind, our journey began in the basement of his Minnetonka home. It was under the name Modular Instruments Company where the seeds of ingenuity were sown.

In 1984, Leroy moved out of his basement and changed the name to Lind Electronic Design Co., Inc. It was during this time Lind became active in the Apple community and Leroy started to receive requests from Apple for products to use for their first "portable" computers. In 1989, Lind introduced a battery pack for Apple Computers.

With a fervent belief in the transformative potential of portable power, Lind Electronics embarked on a quest to redefine the possibilities of mobile computing. Armed with a pioneering spirit and a commitment to excellence, we set out to create power solutions that would fuel the aspirations of a rapidly evolving world.

From humble beginnings, our passion for innovation propelled us to the forefront of the industry, earning

Lind Electronics a reputation for reliability and durability.

As the digital revolution swept across the globe, our power adapters became indispensable companions to professionals navigating the frontiers of technology. With each passing year, Lind Electronics expanded its horizons, diversifying its product offerings to serve a multitude of industries. From public safety to transportation, military to healthcare, our power solutions found homes in the most demanding environments, powering missions critical to the fabric of society.

Driven by a relentless pursuit of excellence, Lind Electronics continues to push the boundaries of possibility. Our commitment to innovation knows no bounds, as we leverage cutting-edge technology to engineer power solutions that surpass expectations and defy limitations.

As we look to the future, Lind Electronics remains steadfast in its mission to empower the world with uncompromising power solutions. With a rich history steeped in innovation and a vision poised for the next frontier, we stand ready to illuminate the path forward, one charge at a time.

## **FOLLOW US FOR UPDATES AND NEWS**



Want to stay in the loop with the latest innovations in power adapter technology? Follow Lind Electronics on social media and be the first to know about our cutting-edge products, exclusive updates, expert tips and industry insights!

#### **HASHTAG:**

#LindElectronics #RuggedReliableResponsive #TeamLind #MobilePowerSpecialists

## **MOBILE POWER SOLUTIONS** FOR UTILITY APPLICATIONS

At Lind Electronics, we understand the critical role that reliable power plays in keeping your utility applications and equipment running smoothly. That's why we're proud to offer our cutting-edge mobile power solutions designed specifically for utility use. Our rugged and dependable power adapters ensure your applications stay charged and operational, minimizing downtime and maximizing productivity. To narrow down the best solution for your needs, begin by asking yourself these important questions:

01

02

03

#### WHAT DEVICE IS BEING POWERED?

Identifying your device ensures that you get the correct power adapter to support your specific need and desired connectivity.

#### WHAT IS THE VEHICLE'S VOLTAGE?

By knowing the voltage or power requirement of your utility application we can ensure that you get the appropriate power supply for your specific need.

#### ARE LIND POWER ADAPTERS COMPATIBLE WITH MY DEVICE?

We offer a wide range of power adapters that are compatible with most laptops, tablets, and other electronic devices. Please check our product specifications or contact our customer support team for assistance in finding the right adapter for your device.

04

## DOES LIND OFFER CUSTOM POWER SOLUTIONS?

Yes, we provide custom power solutions tailored to meet your specific needs. Our engineering team works closely with customers to develop power solutions that address unique requirements and challenges. Contact us to discuss your custom power needs.

## EXPLORE LIND'S UTILITY POWER SOLUTIONS

#### Why Choose Lind Electronics for Your Forklift Power Needs?



#### **1. RUGGED DURABILITY**

Our power solutions are built to withstand the toughest conditions. Whether operating in a warehouse, distribution center, or outdoor facility, Lind Electronics products are engineered for longevity and resilience.

#### 2. HIGH-EFFICIENCY PERFORMANCE

Designed to deliver consistent and high-performance power, our adapters ensure your forklifts remain operational throughout the workday. Say goodbye to frequent battery changes and unexpected downtime.



#### **3. INCREASED PRODUCTIVITY**

By reducing downtime and maintenance needs, our power solutions help you maximize productivity and keep your operations running smoothly. Focus on what matters most getting the job done efficiently.

#### 4. EASY INTEGRATION

Lind Electronics power adapters are designed for seamless integration into your existing forklift systems. Installation is straightforward, and our solutions are user-friendly, ensuring minimal disruption to your operations.









# POWER ADAPTERS MAINTAIN POWER IN YOUR UTILITY APPLICATIONS SO

MAINTAIN POWER IN YOUR UTILITY APPLICATIONS SO YOUR TABLET OR LAPTOP CAN WORK AS LONG AS YOU DO.

Lind Electronics is renowned for manufacturing high-quality power adapters, which are specifically designed to meet the rigorous demands of utility applications. Our power adapters are known for their reliability, durability, and efficiency, making them a preferred choice for powering a wide range of devices, including laptops, tablets, and ruggedized equipment. Lind power adapters often feature advanced protection mechanisms, such as over-voltage, over-temperature, and short-circuit protection, ensuring the safety and longevity of both the adapter and the connected devices. Additionally, they are designed to operate under extreme conditions, making them suitable for use in harsh environments.





## AUTO POWER ADAPTER (90 - 120W)

#### **FEATURES**

- Low Input Voltage Disconnect
- High Input Voltage Disconnect
- Output Short Circuit Protection
- Output Overcurrent Protection
- Internal Over Temperature
   Protection
- LED on adapter indicates output power is present
- LED on cig plug indicates input power is present (most models)
- Output power up to 120W
- Low EMI
- · Custom cable options available

#### **TECHNICAL INFORMATION**

- POWER INPUT: Noted on label
- POWER OUTPUT: Noted on label
- INPUT FUSE: Auto Mini (noted on label)
- INDICATORS: LED on automobile plug (input present); LED on adapter (output present)



Power your PC laptop or notebook computer from your vehicle using a Lind Auto Power Adapter. These adapters are built to work with specific laptop brands and models to ensure the highest level of compatibility and performance when charging your mobile computer.

Lind's Auto Power Adapters are designed to accept input voltages from 11-16 volt DC or 12-32 volt DC power sources, including automobiles, military vehicles or batteries. Output voltages and connectors are available to power nearly all laptop computers currently in use. Custom input and output characteristics can be programmed into the adapters for special applications.

Lind power adapters incorporate the highest degree of circuit protection for your devices and our robust design makes our products well-suited for use in rugged mobile environments and applications. The adapter's electronics are shielded by a rugged epoxy-sealed case to protect the internal circuits from damage caused by shock and/or vibration. The case is designed with a finned exterior to improve heat dissipation.

## **AUTO POWER ADAPTER (70W)**



Charge your laptop from the ground or in the air using a Lind Auto Power Adapter. These adapters charge laptops requiring 70 watts of power or less\*.

Lind's Power Adapters are designed to accept input voltages from 11-16 volt DC or 12-32 volt DC power sources, including automobiles, military vehicles or batteries. Output voltages and connectors are available to power nearly all laptop computers currently in use. Custom input and output characteristics can be programmed into these adapters for special applications.

Special connector, packaging and mounting configurations are available (contact a Lind Sales Representative).

Lind Power Adapters incorporate the highest degree of circuit protection for your laptop or tablet and the adapter itself. The adapter's electronics are housed in a rugged aluminum or plastic case, filled and sealed with epoxy potting material.

\*The power provided on commercial flights is limited to 75 watts and is subject to availability on aircraft. Contact your airline for in-seat power availability on your flight.

#### **FEATURES**

- Low Input Voltage Disconnect
- High Input Voltage Disconnect
- Output Short Circuit Protection
- Output Overcurrent Protection
- Internal Over Temperature
   Protection
- LED on adapter indicates output power is present
- LED on cig plug indicates input power is present (most models)
- Output power up to 70W
- Custom cable options available
- Aluminum or plastic extrusion available

- DIMENSIONS (APPROX.): 4.1 x 2.4 x 1.3 inches (104 x 61 x 33 mm) excluding cables
- WEIGHT (APPROX.): .58 pounds (.26 kg) excluding cables
- INPUT VOLTAGE RANGE: 11 16 VDC or 12 - 32 VDC (depending on model)
- OUTPUT VOLTAGES AVAILABLE: 9 - 24 VDC (others available contact Lind)
- INPUT FUSE: 3AG in input cable



## **MICRO POWER ADAPTER**

#### **FEATURES**

- Output Short Circuit Protection
- Output Overcurrent Protection
- Internal Over Temperature
   Protection
- Automatic Restart after Fault Removal (most models)
- Field Replaceable Cables (most models)
- LED Output Power Present Indicator on Adapter
- LED Input Power Present Indicator on Cig Plug (most models)
- Output power up to 24W
- · Custom cable options available

#### **TECHNICAL INFORMATION**

- DIMENSIONS (APPROX.): 3.7 x 1.7 x .9 inches (94 x 43 x 23 mm) excluding cables
- WEIGHT (APPROX.): .26 lbs (.12 kg) excluding cables
- INPUT VOLTAGE RANGE: 11 16 or 12 - 32 VDC (depending on model)
- OUTPUT VOLTAGES AVAILABLE: 3.3 - 24 VDC (others available contact Lind)
- INPUT FUSE: 3AG in input cable



Lind's Micro Power Adapters are designed to charge devices requiring a maximum of 24 watts of power or less. Its compact and lightweight design makes the Micro Power Adapter easy to install in tight and narrow spaces.

The Micro Power Adapter provides special safety circuitry to protect both your laptop and the adapter. Power conversion circuits with extensive protection circuitry provide reliable and continuous power to your laptop.

Each Micro Power Adapter's electronics is shielded by an epoxy-sealed case to protect the internal circuits from damage caused by shock and/or vibration. Its durable construction withstands extensive wear and tear in any harsh mobile environment. And snap-in connections make replacing missing or damaged cables in the field easy and hassle-free.

Lind Power Adapters incorporate the highest degree of circuit protection for your laptop or tablet and the adapter itself. The adapter's electronics are housed in a rugged plastic case, filled and sealed with epoxy potting material.

## **MOUNTABLE POWER ADAPTER**



Lind Mountable Power Adapters (80 - 120 watt series) are designed for installation to a flat surface area without the use of clamps, brackets or tie wraps. Slotted screw holes are molded in each corner for easy installation.

Lind's Mountable Power Adapters adjust, condition and regulate the power from the input to the correct DC voltage required for proper operation of the laptop. Voltage spikes or surges occurring on the voltage line are filtered by the adapter to eliminate the possibility of damage to the laptop due to input voltage variations.

Lind Power Adapters incorporate the highest degree of circuit protection for your Toughpad and the adapter itself. The adapter's electronics are housed in a rugged plastic case, filled and sealed with epoxy potting material. This protects the adapter from potential damage by shock, vibration, water and dust, and also guarantees improved heat dissipation.

This Lind Power Adapter incorporates field-replaceable input and output cables, thus, making servicing easy and efficient.

#### **FEATURES**

- Low Input Voltage Disconnect
- High Input Voltage Disconnect
- Output Short Circuit Protection
- Output Overcurrent Protection
- Internal Over Temperature
   Protection
- Automatic Restart 10 seconds after Fault Removal
- Field Replaceable Cables (most models)
- LED Output Power Present Indicator on Adapter
- LED Input Power Present Indicator on Cig Plug (most models)
- Mountable housing using four #8 screws (not included)
- Output power up to 120W
- Custom cable options available

- INPUT VOLTAGE 11 16 VDC or 12 - 32 VDC (depending on model)
- OUTPUT VOLTAGE —
   10 24 VDC (others available contact Lind)
- INPUT FUSE 15A ATO Mini in adapter
- WEIGHT (APPROX.) .86 lbs (.39 kg) excluding cables
- DIMENSIONS (APPROX.) 5.61 x 3.05 x 1.03 inches (143 X



## **USB-C POWER ADAPTER**

#### **FEATURES**

- Low Input Voltage Cut Off (LIVCO)
- 10-sec LIVCO delay
- High Input Voltage Cut Off
- Output Overcurrent Protection
- Internal Over Temperature
   Protection
- VBUS to CC short protection
- High Output Voltage Limit
- Automatic Restart of Adapter
- ESD protection on VBUS, CC lines
- Full current-limiting capability in PPS mode
- Supported USB-C Charging Protocols:
   USB-C
- USB PD 3.0
- USB BC 1.2 (legacy charging)
- Custom cable options available

#### **TECHNICAL INFORMATION**

- INPUT VOLTAGE: 11-16 or 11-32 VDC
- OUTPUT VOLTAGES: 5V @ 3A, 9V @ 3A, 15V @ 3A and 20V @ 5A
- PPS (PROGRAMMABLE POWER SUPPLY) MODES:
   5V-16.9V (20mV increments),
   0-3A (50mA increments)
   17-20V (20mV increments),
   0-5A (50mA increments)
- OUTPUT VOLTAGE RIPPLE: 150mV at 100W load
- OPERATING TEMPERATURE: -20° to +40°C
- STORAGE TEMPERATURE: -40° to +85°C
- WEIGHT (APPROX.): 0.82 lbs (0.37 kg) excluding cables
- DIMENSIONS (APPROX.): 5.31 x 2.95 x 0.98 inches (135 x 75 x 25 mm) excluding cables



The Lind Fully Rugged 60 or 100W USB-C power adapter is designed to deliver continuous, reliable power to your mobile devices that use a USB-C input connector for power. Its rugged design combined with its safety features make this adapter ideally suited for daily use in even the most extreme environments and demanding applications.

Lind power adapters incorporate the highest degree of circuit protection for your devices and our robust design makes our products well-suited for use in rugged mobile environments and applications. The adapter's electronics are shielded by a rugged epoxy-sealed case to protect the internal circuits from damage caused by shock and/or vibration. The case is designed with a finned exterior to improve heat dissipation.

#### **Connector Options:**







Corner USB-C

Straight USB-C

Left-Angle USB-C with screw pin



Right-Angle USB-C with screw pin

## **AC/DC RUGGED COMBO ADAPTER**



Lind's line of Ruggedized AC/DC Combo Power Adapters allow you to power and charge your laptop from either an AC or DC voltage source.

Each ruggedized combo power adapter comes standard in a durable aluminum case or housing that is designed to withstand harsh operating conditions, making it an ideal choice to power your laptop in demanding physical environments.

Most of these ruggedized combo power adapters feature field replaceable input/output cables with snap-in connections to make servicing easy and efficient.

#### **FEATURES**

- Withstands extreme shock and vibration
- Operation over wide temperature range
- Epoxy sealed to resist moisture and humidity
- Output overvoltage and overcurrent protection
- Replaceable input and output cables on most models
- The combo adapter can accept power from AC or DC voltage sources
- Optional 400 Hz AC adapters available
- Output power up to 120 watts
- Output short circuit protected
- Output Current Limit
- Internal overtemperature shut down (DC input only)
- Low Input Voltage Cut Off (DC input only)
- · Automatic reset of safety Cut Offs
- · Custom cable options available

- INPUT VOLTAGE: 90-264 VAC
- OUTPUT POWER: up to 90W
- FREQUENCY: 47-63 Hz (400 Hz AC adapters available)
- OPERATING TEMPERATURE: -40° to +40°C
- STORAGE TEMPERATURE: -40° to +85°C



## **REPLACEMENT AC ADAPTERS**

#### **FEATURES**

- Universal AC Input Range
- Various DC output connectors available
- Up to 90W, 120W & 150W models available
- UL Listed and CE Marked
- Various AC cords available
- RoHS compliant

#### **TECHNICAL INFORMATION**

- INPUT VOLTAGE: 100-240 VAC
- OUTPUT VOLTAGES: 12-24 VDC
- OPERATING TEMPERATURE: -20° to +40°C
- STORAGE TEMPERATURE: -40° to +85°C
- WEIGHT (APPROX.): - 90W: 1.00 lbs (0.45 kg) excluding cables - 120W: 1.30 lbs (0.59 kg) excluding cables - 150W: 1.10 lbs (0.50 kg) excluding cables
- DIMENSIONS (APPROX.):

   90W: 5.0 x 2.25 x 1.25 inches
   (127 x 57 x 32 mm) excluding cables
   120W: 6.875 x 2.375 x 1.5 inches

(175 x 60 x 38 mm) excluding cables – 150W: 6.81 x 2.36 x 1.5 in

- 150W: 6.81 x 2.36 x 1.5 in (173 x 60 x 38 mm) excluding cables



The Lind Replacement AC Adapter is designed to replace missing or damaged AC power supplies originally provided with your laptop. These adapters meet or exceed the laptop manufacturer's original specifications.

Each unit features a power-on LED and universal switching for 100 - 240 Vac input voltage. The device comes with a 48 inch long attached output cable supplied with a 60 inch long AC input cord.

Tips are available for most models to plug the Lind Replacement AC Power Adapter into your laptop. 90, 120 and 150 watt output versions of these adapters are available.

POWER ADAPTERS

## **DC/DC POWER MODULES**



The Lind DC/DC Power Module provides a regulated DC voltage output to power laptops and other devices from any 9 - 42Vdc power source. Voltage spikes or surges occurring on the input voltage line are filtered by the adapter to eliminate the possibility of damage to the laptop caused by supply voltage variations.

Power is adjusted, conditioned and regulated from the power source to the correct DC voltage required for proper laptop operation.

The DC/DC Power Module's electronics are shielded by an aluminum case to protect the internal circuits from damage caused by shock and/or vibration. Its durable construction withstands extensive wear and tear in any harsh mobile environment.

#### **FEATURES**

- Low Input Voltage Disconnect
- · High Input Voltage Disconnect
- Output Short Circuit Protection
- Output Overcurrent Protection
- Internal Over Temperature
   Protection
- Automatic Restart 10 seconds after Fault Removal
- Terminal block input and output connections
- Output power up to 120W

- INPUT VOLTAGE: 11 16 VDC, 12 - 32 VDC, or 9 - 42 VDC (depending on model)
- OUTPUT VOLTAGE: 10 24 VDC (others available contact Lind)
- INPUT FUSE: External input fuse required
- OPERATING TEMPERATURE: -20° to +40°C
- STORAGE TEMPERATURE: -40° to +85°C

# SHUTDOWN TIMERS FOR UTILITY APPLICATIONS

Lind Electronics' Shutdown Timers are a game-changer for utility applications, designed to enhance operational efficiency and equipment longevity. Our timers provide an intelligent solution by automatically shutting down the applications electrical system after a predetermined period of inactivity, thereby preventing unnecessary battery drain and ensuring optimal power usage. This not only extends the battery life but also reduces maintenance costs and downtime, keeping your devices in peak condition. Built with durability and reliability in mind, our timers are easy to install and configure, making them a practical and essential upgrade for any utility setting. Trust Lind Electronics to deliver solutions that keep your operations running smoothly and efficiently.



## **SHUTDOWN TIMER**

#### FEATURES

- Low and high voltage shutdown to protect battery and loads
- Loads up to 30 ADC. Two output connections (optionally fused at 15A each)
- Reverse polarity protected
- Automatic activation by sensing the battery voltage (battery not charging = Timer ON)
- Optional activation by ignition switch connection (ignition OFF = Timer ON )
- Optional alarm output
- LED indicators for ON, OFF and Timing
- Speed-up time test switch (set Delay divided by 100)
- Override switch for 12 minute emergency operation after time out or failure of the engine to start
- Protected against automotive load dump
- Screw terminal or Terminal Block connection
- Black PC/ABS Case with mounting flanges

#### **TECHNICAL INFORMATION**

- INPUT VOLTAGE RANGE: 9 18 (18 - 36) VDC
- MAXIMUM LOAD (2 OUTPUT CONNECTIONS): 30A (20A)
- TIME DELAY ADJUSTMENT RANGE: 0 sec. to 4 hrs, 5 sec. to 2 hrs, 12 min. to 18 hrs, (custom options available)
- DIMENSIONS (APPROX.): 5.25" x 2.82" x 1.89" (133 x 72 x 48 mm)
- WEIGHT (APPROX.): .3 lbs (.14 kg)



The Lind Shut Down Timer protects your vehicle's battery from over discharge by shutting OFF up to 30 amp loads at a preset time after the engine is shut down or when the battery reaches a low voltage level.

An emergency switch allows 12 minutes of operation after the timer shuts down the equipment. The Shut Down Timer is normally activated by sensing the electrical system voltage. When the alternator goes OFF the timed sequence is started.

A unique feature of the Shut Down Timer is that it allows full testing of the system after installation. Momentary closure of the test switch reduces the delay time by a factor of 100 to allow a quick test of the system timing function.

## **LOW PROFILE SHUTDOWN TIMER**



The Lind Low Profile Shut Down Timer protects the vehicle battery from over discharge by shutting OFF up to 30 amp loads at a preset time after the engine is shut down or when the battery reaches a low voltage level.

An emergency switch allows 12 minutes of operation after the timers shut down the equipment. The Low Profile Shut Down Timer is typically activated by sensing the electrical system voltage. When the alternator goes OFF the timed sequence is started.

A unique feature of the Low Profile Shut Down Timer is that it allows full testing of the system after installation. Momentary closure of the test switch reduces the delay time by a factor of 100 to allow a quick test of the system timing function.

#### **FEATURES**

- More compact design via reduced height profile
- Adjustable shut down delay time from 5 seconds to 4 hours (other delays possible - consult factory)
- Low voltage shut down at 10.5 VDC
- High voltage shut down at 18 VDC with auto reset
- Loads up to 30 ADC
- · Reverse polarity protected.
- Automatic activation by sensing the battery voltage (battery not charging = timer ON)
- Optional activation by ignition switch connection (ignition OFF = timer ON)
- LED indicators for ON, OFF and Timing
- Speed-up time test switch (set delay divided by 100)
- Over-ride switch for 12 minute emergency operation after time out or failure of the engine to start
- Protected against automotive load dump
- Screw terminal or Terminal Block connection

- INPUT VOLTAGE RANGE: 9 18 (18 - 36) VDC
- MAXIMUM LOAD (2 OUTPUT CONNECTIONS): 30A (20A)
- TIME DELAY ADJUSTMENT RANGE: 5 Sec.- 4 Hrs
- DIMENSIONS (APPROX.): 4.3 x 3.8 x 1.2 inches (109 x 97 x 30 mm)
- WEIGHT (APPROX.): .5 lbs (.22 kg)



## **RUGGEDIZED SHUTDOWN TIMER**

#### **FEATURES**

- Low voltage shut down to protect battery
- High voltage shut down to protect loads
- · Loads up to 20 ADC
- Reverse polarity protected
- Automatic activation by sensing the battery voltage (battery not charging = Timer ON )
- Optional activation by ignition switch connection (ignition OFF = Timer ON )
- Optional alarm output
- · LED indication of ON and Timing
- Protected against automotive load dump
- Screw terminal connections
- Black PC/ABS Case with mounting flanges

#### **TECHNICAL INFORMATION**

- INPUT VOLTAGE RANGE: 9 18 (18 - 36) VDC
- MAXIMUM OUTPUT CURRENT: 20A
- DIMENSIONS (APPROX.): 3.0 x 2.05 x 1.5 inches (76 x 52 x 38 mm)
- WEIGHT (APPROX.): .33 lbs (.15 kg)



The Lind Ruggedized Shut Down Timer (RSDT) protects the automobile battery from over discharge by shutting OFF loads at a preset time after the engine is shut down or when the battery is discharged. The RSDT also protects radio or computer equipment from damage caused by low or high input voltage experienced with alternator failure or improper voltage jump-starts.

The RSDT is typically activated by sensing the voltage of the battery. When the alternator stops charging, the timed sequence is started. An ignition input switch is provided as an optional activation method.

Used as a Shut Down Timer, the RSDT can be used for loads up to 20A. As a Relay Driver, the RSDT will drive relays up to 200 Amps. The RSDT can be factory set to any desired delay from a few seconds to several hours.

## **T2 SHUTDOWN TIMER**



The Lind T2 Shut Down Timer protects your vehicle's battery from overdischarge by shutting off up to 50 amp loads at a preset time after the engine is shut down or when the battery is discharged to a low voltage level.

The timer also protects radio or computer equipment from damage due to low or high input voltage as experienced with alternator failure or improper voltage jump-starts.

An emergency switch allows 15 minutes of operation after the timer shut down the equipment. An ignition switch input is provided as an optional activation method but is not necessary. The timer is normally activated by sensing the alternator charge voltage level applied to the battery. When the alternator goes off the timed sequences are started.

A unique feature of the T2 Shut Down Timer is that it allows full testing of the system after installation. Momentary closure of the test switch reduces the delay time by a factor of 100 to allow a quick test of the system timing function.

#### **FEATURES**

- Two individual timers each adjustable from 0 - 4 hours (other delays possible, contact Lind)
- · Loads up to 50 Amps
- Compact design via reduced height profile
- Automatic activation by sensing the battery voltage (battery not charging = Timer On)
- Optional activation by ignition switch connection (Ignition Off = Timer On)
- Over-ride switch for 15 minute emergency operation after time out or failure of the engine to start
- Protected against automotive load dump
- Optional alarm output
- Screw terminal or terminal block connection options
- Black PC/ABS Case with mounting flanges

- INPUT VOLTAGE RANGE: 8 18 (16 - 36) VDC
- LOAD CURRENT: Up to 30A per channel (50A max total)
- TIME DELAY ADJUSTMENT RANGE: 0 - 4 Hrs
- OVER-RIDE MODE TIME SETTING: 15 minutes (both outputs)
- DIMENSIONS (APPROX.): 4.3 x 3.8 x 1.2 inches (109 x 97 x 30 mm)
- WEIGHT (APPROX.): .5 lbs (.22 kg)

# OTHER SOLUTIONS ENERGIZE YOUR DEVICES WITH UNMATCHED RELIABILITY.

At Lind Electronics, we offer a diverse range of innovative products designed to meet your power and connectivity needs beyond our renowned mobile power adapters and shutdown timers. Our high-performance battery chargers ensure your devices are always ready for action, providing efficient and reliable power management. Our sturdy forklift power adapter mounts securely hold your power adapters in place, enhancing operational safety and efficiency. Additionally, our versatile USB-C dongles expand your device capabilities. Trust Lind Electronics to deliver comprehensive solutions that power your productivity and keep you powered in any environment.





## **MODULAR BATTERY CHARGER**

#### **FEATURES**

 Simultaneously charge Dell batteries for the 5420, 5424, 5430, 7330 and 7424 Dell Latitude Rugged Notebooks and 7202, 7212, 7220, 7230 and 7030 Tablets

#### **TECHNICAL INFORMATION**

- INPUT VOLTAGE: 19.5 Vdc
- MAX CURRENT CHARGE: 1 Amp/ bay (up to 10 Amps)
- TEMPERATURE RANGE: 32°F to 104°F (0°C to 40°C)

NOTE: Charging outside of temp range may result in temporary stoppage of charging.

- LED LIGHT INDICATOR: Green / Yellow / Red
- PRODUCT WEIGHT: 0.5 lbs
- PACKAGED WEIGHT: 0.75 lbs
- Tested to MIL-STD-810G certification



Keep your Dell Latitude Rugged Batteries fully charged with the Lind Electronics Modular Multi Bay Charger. Charge up to 16 batteries per charger with interchangeable battery bays for the Dell Latitude Rugged line of notebook and tablet computers. Lind battery chargers incorporate the highest degree of circuit protection to ensure your Dell batteries are charged properly.

The Lind Electronics Modular Multi Bay Charger begins with the Master Controller (DECHMC-5021). This is powered by a single Dell compatible AC Power Adapter. The wattage of the AC Adapter can range from 45 to 330 watts and will determine how many batteries are charged simultaneously.

The higher the wattage of the AC Adapter, the higher the number of batteries being charged, lowering the overall charge time. The power adapter shipped with the Dell Latitude Rugged Notebook or Tablet may be used with the charging system. When charging four batteries or more, a 240 watt adapter is recommended for optimal charging times. Connected to the Master Controller are the individual battery Charger Bays.

The DECHCB-5439 bay charges batteries for the Dell Latitude Rugged 5420, 5424, 5430, 7330 and 7424 Notebooks. The DECHCB-5440 bay charges batteries for the Dell Latitude Rugged 7202, 7212, 7220 and 7230 Tablets. The DECHCB-5605 bay charges batteries for the Dell Rugged 7030 Tablet. Any combination of bays (up to 16) may be used within the same charging system.

OTHER SOLUTIONS |

## **LIND POWER SUPPLY MOUNT**



Our Power Supply Mount for Lind adapters is the ultimate solution for maintaining reliable power in your vehicle applications. Designed with both durability and functionality in mind, this mount ensures your Lind power supply stays put thus keeping your electronic devices securely connected and powered throughout the toughest environments.

#### **FEATURES**

- This mount features VESA 75, AMP's, and Gamber-Johnson hole patterns
- Attaches a LIND Power Supply between the docking station/cradle and motion attachment
- Accommodates most LIND power supplies (except Item No. 15209 for the Panasonic JT-B1)
- Attaches to any Gamber-Johnson docking station or cradle with the Gamber-Johnson or VESA hole pattern

- DIMENSIONS (APPROX.): 5.0 x 10.01 x 1.27 inches (127 x 254 x 32 mm)
- WEIGHT (APPROX.): 1.52 lbs (0.69 kg)



## **USB-C DONGLE CABLE**

#### **FEATURES**

- Convert the 7.4mm barrel output connector from any Dell AC or Lind adapter to a USB-C connector
- Designed as a passthrough device for converting barrel connections to USB-C
- USB-C output voltage/power will match the characteristics of the supply feeding into it (up to 100W)

#### **TECHNICAL INFORMATION**

- OUTPUT POWER: Up to 100 Watts
- RELATIVE HUMIDITY: 95% (No Condensation)
- OPERATING TEMPERATURE: -20° to 40°C
- STORAGE TEMPERATURE: -40° to 85°C
- WEIGHT (APPROX.): 1.5 ounces (0.04 kg) excluding cables
- OUTPUT CABLE OPTIONS: 4" (10.16 cm) or 36" (91.44 cm) USB-C cable (straight or right angle with screw-on)





With this small and light-weight Lind Dongle cable you can charge your USB-C powered laptop and tablet with the commonly available  $7.4 \times 5.0$ mm and  $4.5 \times 3.0$ mm barrel power adapters.

You can use an AC Adapter that is compatible with a 45W, 65W, 90W, 120W, 130W, 150W or 240W barrel power adapter.

This Lind USB-C dongle will pass through the power (same wattage as the AC Adapter with a maximum throughput of 100 Watts) to the compatible computer with USB-C Power input port. Simply plug the barrel power adapter into the Dongle cable, then plug the Lind Dongle cable into your USB-C powered laptop or tablet, and begin charging instantly.

Custom (hardwired) input cables for the Lind dongle are available on request.

## **USB-C RIGHT ANGLE DONGLE CABLE**



With this small and light-weight 90° right angle Lind Dongle cable with screw pin connector you can charge your USB-C powered laptop and tablet with the commonly available 7.4 x 5.0mm and 4.5 x 3.0mm barrel power adapters.

You can use an AC Adapter that is compatible with a 45W, 65W, 90W, 120W, 130W, 150W or 240W barrel power adapter.

This Lind USB-C dongle will pass through the power (same wattage as the AC Adapter with a maximum throughput of 100 Watts) to the compatible computer with USB-C Power input port. Simply plug the barrel power adapter into the Dongle cable, then plug the Lind Dongle cable into your USB-C powered laptop or tablet, and begin charging instantly.

Custom (hardwired) input cables for the Lind dongle are available on request.

#### **FEATURES**

- Convert the 7.4mm barrel output connector from any Dell AC or Lind adapter to a USB-C connector
- Designed as a passthrough device for converting barrel connections to USB-C
- USB-C output voltage/power will match the characteristics of the supply feeding into it (up to 100W)

- OUTPUT POWER: Up to 100 Watts
- RELATIVE HUMIDITY: 95% (No Condensation)
- OPERATING TEMPERATURE: -20° to 40°C
- STORAGE TEMPERATURE: -40° to 85°C
- WEIGHT (APPROX.): 1.5 ounces (0.04 kg) excluding cables
- OUTPUT CABLE OPTIONS: 4" (10.16 cm) or 36" (91.44 cm) USB-C cable (straight or right angle with screw-on)





## LIND ELECTRONICS PRODUCT WARRANTY

**Our Commitment To You** 

Lind Electronics, LLC. (LIND) warrants the circuit assembly portion of products manufactured by it to be free of defects in material and workmanship for a period of 3 years\* from the date of purchase under normal use. During this warranty period, LIND will, at its option, repair or replace the product at no charge for parts or labor when the product is returned postage paid as a complete unit to LIND. Proof of purchase and a letter explaining the problem must accompany the returned unit.

This warranty does not apply if any part of the adapter, its cables or connection jacks have been altered, subjected to abuse, accident or misuse. This warranty excludes incidental or consequential damage resulting from the product or the use of the product.

This warranty is in lieu of all other warranties expressed or implied and no person is authorized to assume for LIND any other liability in conjunction with this product. The warranty gives you, the purchaser, specific legal rights and you may have other rights which may vary from state to state and country to country.

The LIND product you are purchasing has not been designed for, or certified for use in, life support applications. Any such use is at your own risk. LIND ELECTRONICS, LLC. HEREBY EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Lind Electronics, LLC. will not be liable for any claims, awards, damages or other liability arising out of the use of LIND products for life support applications whether in the nature of direct, indirect, consequential, special or punitive damages.

\*1 year warranty on custom built adapters and adapters with permanently attached (hardwired) cables.

#### HOW TO MAKE A WARRANTY CLAIM

#### **1. CONTACT US**

Reach out to our customer support team via phone or email. Provide your product details and a description of the issue.

#### 2. SUBMIT PROOF OF PURCHASE

Have your receipt or proof of purchase ready to verify warranty eligibility.

#### **3. SHIP YOUR PRODUCT**

If required, send your product to our Lind Electronics Headquarters. We'll provide shipping instructions and cover the shipping cost.

#### 4. REPAIR OR REPLACEMENT

Once we receive your product, our team will repair or replace the product and return it to you as quickly as possible.



WARRANTY | LIND

## LIND IS HERE FOR YOU! Peace of Mind with Every Purchase

At Lind Electronics, we stand by the quality and reliability of our products. Our comprehensive warranty plan ensures that you can trust our solutions to perform consistently and efficiently. Here's what you can expect:



#### **1. COVERAGE DURATION**

Enjoy up to 1-3 years of protection on Lind Electronics products, safeguarding your investment for the long haul.



#### 2. COMPREHENSIVE PROTECTION

Our warranty covers any defects in materials or workmanship, ensuring that your product functions as intended.



#### **3. HASSLE-FREE CLAIMS**

In the unlikely event of a malfunction, our straightforward claims process makes it easy to get your product repaired or replaced. Simply contact our dedicated support team, and we'll handle the rest.



#### 4. TECHNICAL SUPPORT

Access expert assistance from our knowledgeable technical support team, available to help troubleshoot and resolve any issues you might encounter.



#### 5. FAST TURNAROUND

We prioritize quick resolutions, minimizing downtime and ensuring your operations continue smoothly.

Choose Lind Electronics for top-notch performance and reliability, backed by a warranty plan designed to give you peace of mind. Your satisfaction is our commitment!



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