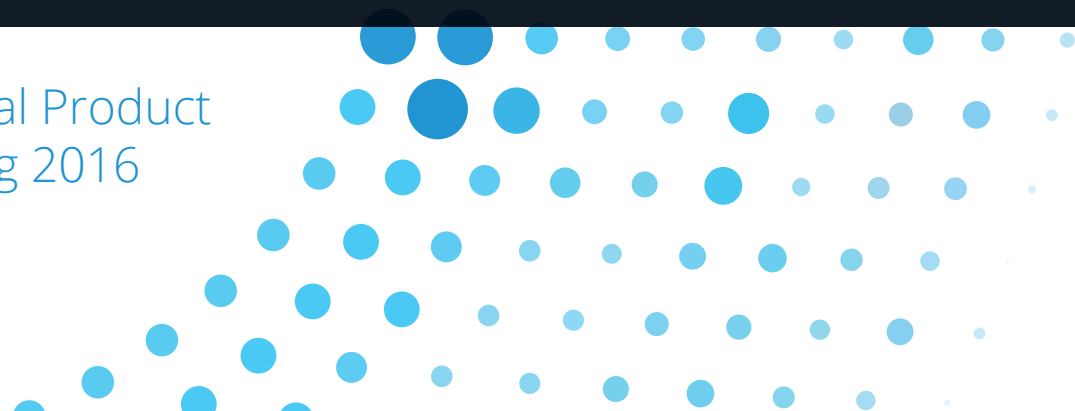


# YOUR LIFE. EMPOWERED

**Don't let a battery stop you**

General Product  
Catalog 2016





## Vision

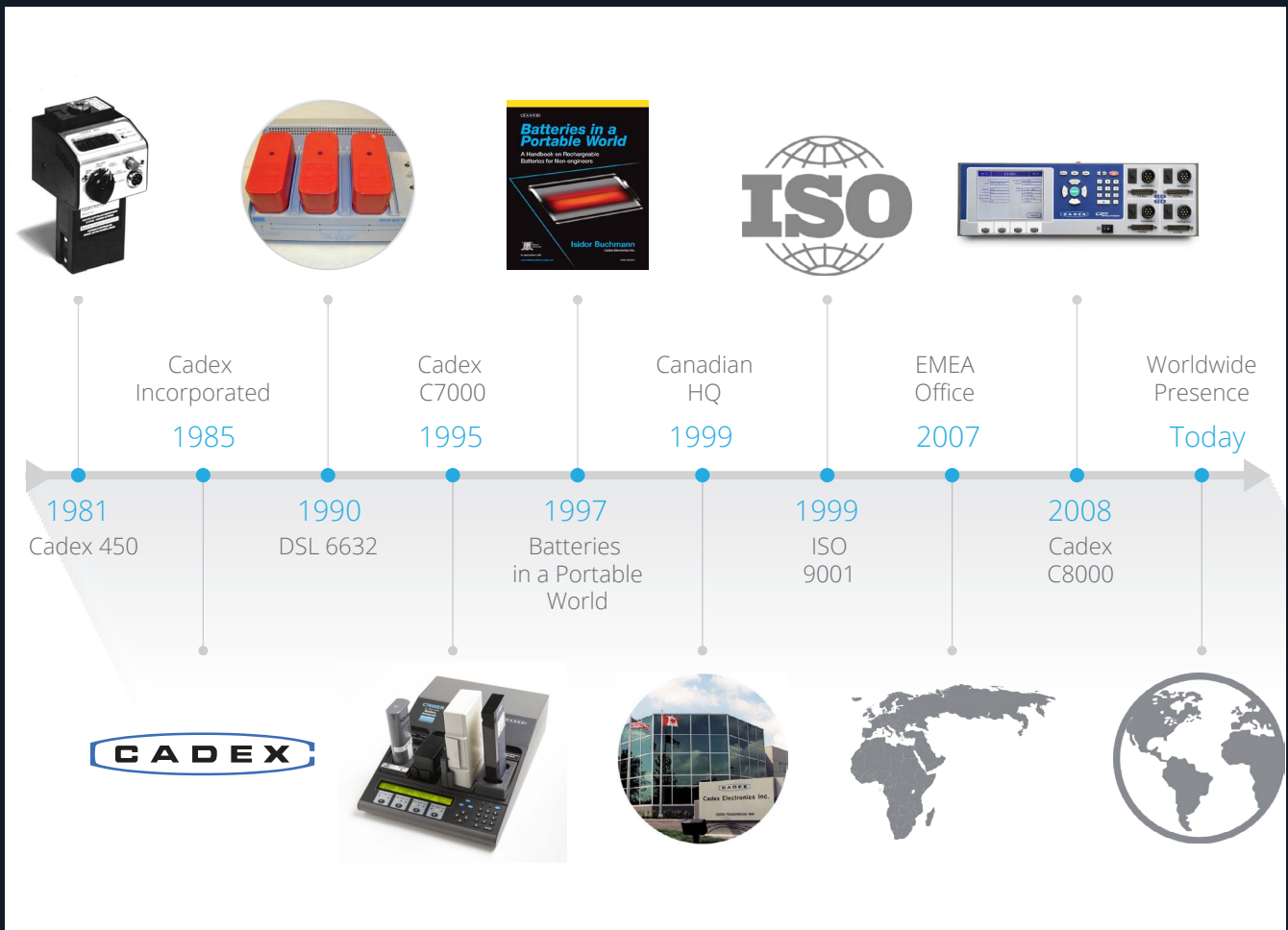
Empower Professionals across the world to ensure they're able to get their job done, anytime, anywhere, while helping the world reduce its dependence on fossil fuels.



## Mission

Develop products to sustain growth and improve technology for the good of humanity. Our team is forward thinking and conducts all work with honesty and integrity. It is by these principles that Cadex endeavors to conquer new markets and become a world leader.

## Our History



# About us

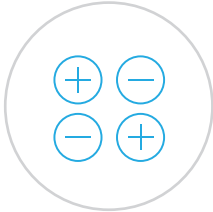
For over 35 years, Cadex Electronics has been at the leading edge of battery technology.

Serving customers in over 100 countries globally, our world-class team empowers local and global clients in getting the most out of their mobile power applications, from Batteries, to Charging, to Lifecycle management technologies.

Headquartered in Vancouver, Canada, and a presence in the USA and Germany, we strive to help the world reduce its dependence on fossil fuels.



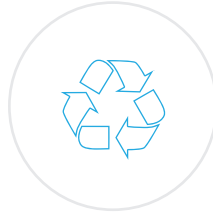
## Complete Mobile Power Solutions



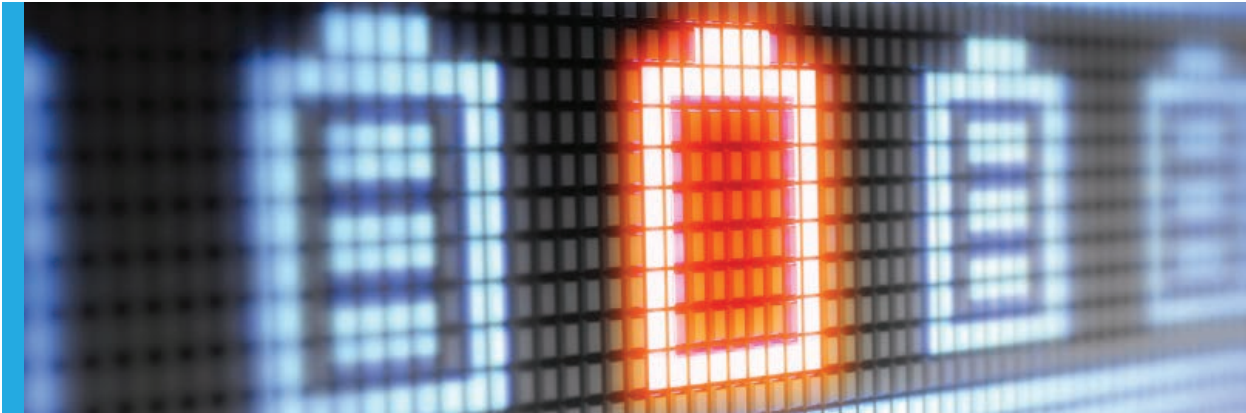
Custom Battery Packs



Universal Conditioning Chargers



Battery Lifecycle Management



# Technologies & Patents

Our solutions empower professionals across the world to deliver, and do more. Anytime, anywhere.



## BatteryLab™

Lab-graded Battery Software system: Control & monitor the battery test, model battery and machine behavior in your lab



## QuickSort™

Ultra-fast and Universal Li-Ion battery SoH check thanks to pre-defined battery profiling



## SnapLock™

Plug & Play Adapter System: Cross-device and backwards-compatibility with over 3,200 adapters available



## RigidArm™

Your all-in-one! Universal battery adapter suitable for most battery types with almost unlimited mounting orientations



## Spectro™

Ultra-fast, non-invasive Capacity & CCA reading in 15 seconds. Ensure reliable power for your on-board electronics

U.S. Patent 7,622,929

U.S. Patent 7,072,871

U.S. Patent 7,019,542

U.S. Patent 6,778,913

# Engineering Expertise



## Charger & Analyzer Design

- Power Management
- PCBs
- Charging Algorithms
- Protection Circuits



## Battery Design

- All chemistries
- Smart Battery Management Systems
- Designed for Critical Environments



## Electro-Mechanical Design

- Plastics and Metals
- Control Circuits and PCBs



## Embedded Software

- User interface
- System Communications



## PC Software Applications

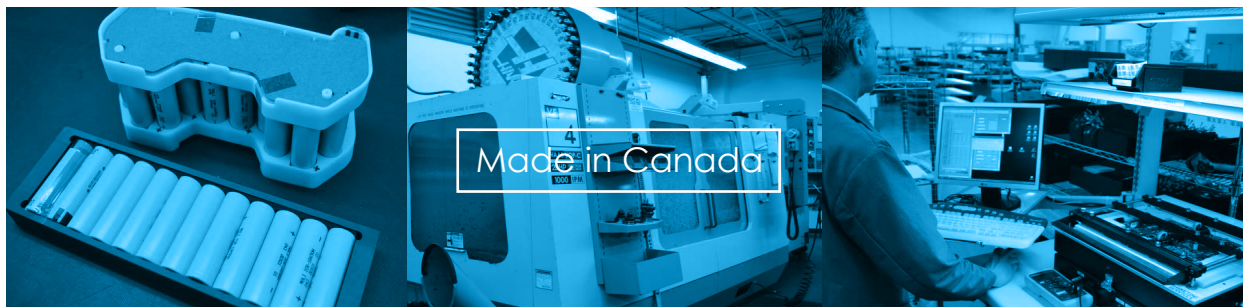
- Data Management
- Reporting and Analysis



## Regulatory & Compliance

- CSA, UL, CE, PSE, FDA
- ISO9001, ISO13485

# Manufacturing Capability



## Industries



Aerospace



Automotive



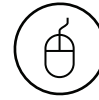
Cellular



Electrical utilities



Healthcare



IT



Logistics



Machinery



Military



Public Safety



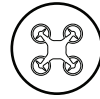
Mobile Radio



Research



Retail



UAV/Drones

## Customers & Partners

We serve clients across the world, from the majority of the Fortune 500 companies to local companies serving specific needs. With off-the-shelf products, or fully custom batteries and chargers, we empower you to deliver

NASA

amazon

Google

Sprint



GENERAL DYNAMICS



PHILIPS

AIRBUS

FDA

BOEING

FOXCONN

SAMSUNG

LOCKHEED MARTIN

CHICAGO POLICE

Telefonica

Emirates

Bell

## Testimonials

We are very pleased with the level of performance of the C7000 and do not know of any other analyzers that can come close to doing the job. They have become an integral part of our Quality Control system.

**Karl Hammond,**  
Service Engineer, Nokia

We need battery equipment and support that can grow with us and I am confident that Cadex is our best choice.

**Peter Gauthier,**  
Radio Operations  
Manager, E-Comm

The Cadex analyzers provide the competitive edge of the best service in the business: immediate in-the-store resolution of technical problems for our customers.

**Jeff Sorrels,**  
Special Project Manager,  
Sprint

## Our Portfolio

Cadex products offer a complete range from Battery Packs, to Chargers, Analyzers, Testers and Battery Management Systems. We develop our products under our Cadex brand as well as OEM products for clients across the world.



### Analyzers

Retail solutions, Service Centers and Professional markets, Laboratory and Manufacturing space

6



### Chargers

Universal Conditioning Chargers, standard and custom made, for all kinds of applications

8



### Adapters

With over 3,200 custom and universal battery adapters for our analyzers and chargers. Whatever the application, we got you covered.

9



### Testers

The fastest lead-acid battery tester in the market. Know the CCA and Reserve capacity in only 15 seconds. Your Service Drive tool.

10



### Battery Packs

From design to manufacture, we develop a complete solution, chargers included

10

# Battery Analyzers



## C7200-C Series Battery Analyzer

The two-station Cadex C7200 suits smaller organizations and storefront operations. 40 watts of charge power at 4 amps per station ensure quick service of larger batteries. This economical analyzer offers the same features as the larger 4-bay unit, but in a smaller form factor.

Battery voltage range 1.2 to 16V	Charge power: 40W/station, 40W total	<a href="#">PART NUMBER</a>
Charge/discharge current up to 4A per station	Discharge power: 35W/station, 70W total	07-720-0100



## C7400-C Series Battery Analyzer

With four-stations and 80 watts of charge power, the Cadex C7400 is most economical in terms of cost per station. The extra stations increase throughput and add flexibility in accommodating batteries that require immediate service.

Battery voltage range 1.2 to 16V	Charge power: 55W/station, 80W total	<a href="#">PART NUMBER</a>
Charge/discharge current up to 4A per station	Discharge power: 35W/station, 140W total	07-740-0100



## C7400ER-C Series Battery Analyzer

The Cadex C7400ER is the most powerful of the C7000 Series battery analyzers. Six amps per station, service of 36 volt batteries and 170 watts of continuous power satisfies most service requirements.

Battery voltage range 1.2 to 36V (Li-ion)	Charge power: 75W/station, 170W total	<a href="#">PART NUMBER</a>
Charge/discharge current up to 6A per station	Discharge power: 75W/station, 200W total	07-740-1100

### Software

	<a href="#">PART NUMBER</a>		<a href="#">PART NUMBER</a>
Cadex BatteryShop™ 1	07-770-2001	Cadex BatteryShop™ 16	07-770-2016
Cadex BatteryShop™ 4	07-770-2004	Cadex BatteryShop™ 32	07-770-2032
Cadex BatteryShop™ 8	07-770-2008	BatteryShop™ Product Lifetime Upgrade Subscription	07-770-2100

### Battery Maintenance Systems – Value Bundles

2-Bay	Cadex C7200 C-Series Battery Analyzer 2 Battery Adapters (any type) Cadex BatteryShop™ 1	BBM2
4-Bay	Cadex C7400 C-Series Battery Analyzer 4 Battery Adapters (any type) Cadex BatteryShop™ 1 DYMO 450 Label Printer USB Barcode Reader DYMO Battery Labels 2-Year Extended Warranty (Total = 4 years)	BBM4
4-Bay Extended Range	Cadex C7400ER C-Series Battery Analyzer 4 Battery Adapters (any type) Cadex BatteryShop™ 1 DYMO 450 Label Printer USB Barcode Reader DYMO Battery Labels 2-Year Extended Warranty (Total = 4 years)	BBM4ER

### Battery Maintenance Systems (All-in-One Advanced Bundles)

2-Bay	Cadex C7200 C-Series Battery Analyzer 2 Battery Adapters (any type) Cadex BatteryShop™ 1 DYMO 450 Label Printer USB Barcode Reader DYMO Battery Labels 2-Year Extended Warranty (Total = 4 years)	AVBM2
4-Bay	Cadex C7400 C-Series Battery Analyzer 4 Battery Adapters (any type) Cadex BatteryShop™ 1 DYMO 450 Label Printer USB Barcode Reader DYMO Battery Labels 2-Year Extended Warranty (Total = 4 years)	AVBM4
4-Bay Extended Range	Cadex C7400ER C-Series Battery Analyzer 4 Battery Adapters (any type) Cadex BatteryShop™ 1 DYMO 450 Label Printer USB Barcode Reader DYMO Battery Labels 2-Year Extended Warranty (Total = 4 years)	AVBM4ER

### Accessories

DYMO 450 Label Printer - Connects to PC USB port, includes USB cable, 100-240VAC	00-004-3037	Voltage Calibration Kit - Traceable to US NIST or Canada NRC	92-770-0212
DYMO Battery Labels - High quality, durable, 1.5" x 0.5" (2-up) 1,500/roll (MOQ= 4 Rolls)	00-004-3031	Voltage Calibration Kit Recertification Fee. Recertification needed every 2 years. Contact Cadex Technical Support for return authorization.	
C7200 C-Series Carrying Case - Pelican Case Model 1500	87-725-0002	USB Barcode Reader - Connects through PC USB port	92-770-0261
C7400 C-Series and C7400ER C-Series Carrying Case - Pelican Case Model 1520	87-725-0004	Null Modem Cable, 20' - Connects analyzer serial port to PC or Edgeport USB Interface	68-931-0007
2-year Extended warranty	99-100-0000	USB Type A Cable - Connects C7000 C-Series analyzer USB port to PC USB port	68-931-0008

# Battery Analyzers



## C5100 Storefront Analyzer

Batteries are blamed for most cell phone problems. To satisfy the customer, batteries are replaced, often to have the fault recur. The Cadex C5100 battery analyzer assists by allowing to check the battery at storefront with a 30-second test.

Improve customer care  
Increase revenue and reduce costs

Protect the environment by discarding fewer batteries

Cadex C5100™ Rapid-Tester	PART NUMBER	Software	PART NUMBER
C5100 Rapid Tester, no AC cord, no RigidArm™	11-510-0000	BatteryStore™ PC Software, Including up to 20 Q-Codes for QuickSort 3	07-770-3000
Services 1 battery; user selectable for Li-Ion – 3.6V, 900-2200 mAh. Includes RigidArm™ Universal Battery Adapter, North American and Euro AC cord, RoHS compliant C5100 Rapid Tester, no AC cord, no RigidArm™	11-510-0001		
<b>Accessories</b>			
Q-Code 1 Year License	07-770-5100		
Q-Code 5 Year License	07-770-5101		
Samsung Bixolon STP-103G Thermal Receipt Printer Connects to serial port, includes serial cable, one roll of thermal paper	00-004-3090		
<b>Value Bundle Systems</b>			
All-In-One	Cadex C5100™ Rapid-Tester RigidArm™ Adapter Cadex BatteryStore™ Samsung Bixolon STP-103G Thermal Printer Includes North America and Euro AC Cord		11-510-0002
C5100 and BatteryStore™	Cadex C5100™ Rapid-Tester RigidArm™ Adapter Cadex BatteryStore™ Includes North America and Euro AC Cord		11-510-0003



## C8000 Lab Analyzer

The Cadex C8000 delivers the versatility needed to ensure you get the right performance from the batteries used in your applications. The C8000 is a multi-purpose tool that allows you to optimize batteries at every stage of product life.

Device Simulation helps you choose the right battery  
Life Cycle Testing helps you characterize the battery  
Service Programs help you maintain the battery  
Custom Program helps you monitor quality and performance

C8000 Advanced Battery Testing System	PART NUMBER	ACCESSORIES	PART NUMBER
Cadex C8000 including BatteryLab™ PC Software 4 Channel desktop or rack-mount battery test system with internal 400-Watt power supply, 100-240VAC. Includes C8000 base unit, and BatteryLab PC software on CD-ROM, 4 ea. 1.8m (6') power port cables, 4 ea. 1.8m (6') auxiliary data cables, one 3m (10 ft.) Ethernet cable, 1 ea. dual port power cable (DPPC), AC power cords, 1 set rack mount brackets, 1 ea. QuickStart Users Guide, Calibration Certificate. Includes North America, Europe and UK AC cords.	11-308-0000	Cadex Load Capture Unit	11-308-0011
		Cadex C8000 Adapter Unit Desktop 2-Bay Adapter Unit connects to C8000 Power Ports by designated cables. Provides access to SnapLock™ Battery Adapter (4-wire only) systems shared with other Cadex systems.	07-510-0000
		Replacement C8000 Auxiliary Data Cable 1.8m (6ft.) DB 25-based cable including 4 differential analog voltage inputs, 4-input/output control for switching, SMBus, clock, data for smart packs, 2 general-purpose analog input.	17-670-0059
		Dual Port Power Cable	17-070-1008
		Replacement C8000 Power Port Cable 1.8m (6ft.) 4-wire battery test cable with removable alligator clips for easy battery connection.	17-670-0058
		C8000 Transport Case – Pelican	87-725-0013
<b>Upgrades</b>			
2-Year Extended Warranty - Extends original 2-year warranty to 4 years.	99-100-0001		
C8000 and BatteryLab™ Lifetime Upgrade Subscription Provides access to all upgrades during product life of the C8000 and BatteryLab.	07-770-2103		



# Universal Conditioning Chargers (UCC)

The Cadex Universal Conditioning Chargers (UCC) offer refinements usually not found on competitive chargers. The rugged design stands up to the critical demands of industrial users. Intelligent adapters allow simultaneous service of nickel-cadmium, nickel-metal-hydride and lithium-ion batteries on the same platform. A conditioning button conditions and calibrates batteries on demand, and a reverse-pulse charging prolongs battery life.



## UCC 1

This compact single-bay battery charger assures freshly charged batteries in the office and on travel. The UCC 1 comes with a 60-watt universal AC power supply for all global voltages.

Part Number: 11-302-0100



## UCC 2

The two-bay charger is designed for desktop, wall mount or vehicle use. The AC version comes with a 60-watt universal power supply.

Part Number: 11-302-0200



## UCC 6

The six-bay charger is suited for desktop or wall mount and features an internal 100-watt universal power supply with detachable cord.

Part Number: 11-302-0600



## UCC Solar

The light-weight UCC Solar charger can be carried in a transit case or tucked away in a backpack. Simply plug the solar panel into the charger or utilize a Y-cable for shaving energy from a vehicle or other UPS battery. An optional AC adapter enables charging from AC main. It supports multiple chemistries including Li-Ion, NiMH and NiCad.

UCC Solar with BB2590 Battery Adapter. Part Number: 11-303-0201

UCC Solar with Motorola MTP850 Battery Adapter. Part Number: 11-303-0202



## UCC Mobile

The UCC Mobile is the vehicle version of the UCC 2, with a DC-DC converter that regulates the 12DC input voltage to ensure proper charging. It comes with a rugged enclosure for extra protection.

Part Number: 11-302-0200

DC Power Cable Part Number: 17-070-1009

# Adapters



## UCC Custom Adapters

Independent Charging for Different Battery Models. Cadex intelligent adapters configure the charger to the C-code (charge-code) of a unique battery type. They can also be factory programmed for your specific battery models. These unique adapters allow the Chargers to service different batteries types simultaneously. That means independent charging for up to 6 different battery models.



## Analyzer Custom Adapters

Custom-built SnapLock™ adapters allow easy interface with commercial packs. The adapters contain C-codes (charge-codes) that configure the analyzer to the correct setting. Each adapter can be programmed with 10 C-codes to service different battery types. Cadex offers over 3,200 custom adapters. If your adapter is not listed on our Battery Adapter Catalog, please contact us.

## Analyzer Universal Adapters



### RigidArm™

The RigidArm™ simplifies connecting small (e.g. cellular phone) batteries. Spring-loaded arms meet the battery contacts from the top down and a lockable mechanism allows quick and repetitive testing. The retractable floor holds the battery in vertical or horizontal position.

Part Number: 07-110-0192



### FlexArm™

The Cadex FlexArm™ accommodates batteries when no custom adapter is on hand. The probes on the flexible arms reach small and awkwardly placed contacts. Magnetic guides keep the battery in position. A temperature sensor monitors the battery. The gold-plated contacts are user-replaceable.

Part Number: 07-110-0180



### Universal Alligator Clips Adapter

The Cadex Smart Cable services larger batteries that are placed outside the unit. The temperature sensor attaches to the battery with a magnet. The alligator clips provide easy connection to batteries with protruding terminals.

Part Number: 07-110-0115

**3,200+**  
CUSTOM ADAPTERS



Aerospace



Broadcast



Cellular



Computers



Game Console



Healthcare



Logistics



Military



Power Tools



Radio



Universal



Other

# Testers

## SPECTRO CA-12

### SPECTRO CA-12 GA

Conventional testers measure CCA only. Cadex Spectro™ Patented 24 Frequency EIS scanning technology can check the impact that on-board electronics have on the battery.

Early battery failure detection with Reserve Capacity ( RC ) testing allows for scheduled battery replacements , reducing costly unscheduled down times.



### SPECTRO CA-12 DC

The Cadex CA-12 DC Battery Rapid Tester featuring Spectro™ estimates capacity and state-of-charge in a non invasive 15 second test using electrochemical impedance spectroscopy (EIS) for supported 6V, 8V and 12V deep cycle lead acid batteries.

This configuration is limited to testing specific Trojan battery models as follows:

T105	T125	T145
T875	T1260	T1275



	PART NUMBER
CA-12-DC Deep Cycle	11-500-0123
<b>Accessories</b>	
CA-12 Clamp Cable Assembly - (Limited 90-day warranty)	17-797-0108
CA-12 Extended Battery - (7.2V, 4400mAh, Li-Ion)	01-000-0007

Upgrades	PART NUMBER
1-Year Extended Warranty	99-100-0002
1-Year Extended Warranty Extends CA-12-DC original	
2-year warranty to 3 years.	

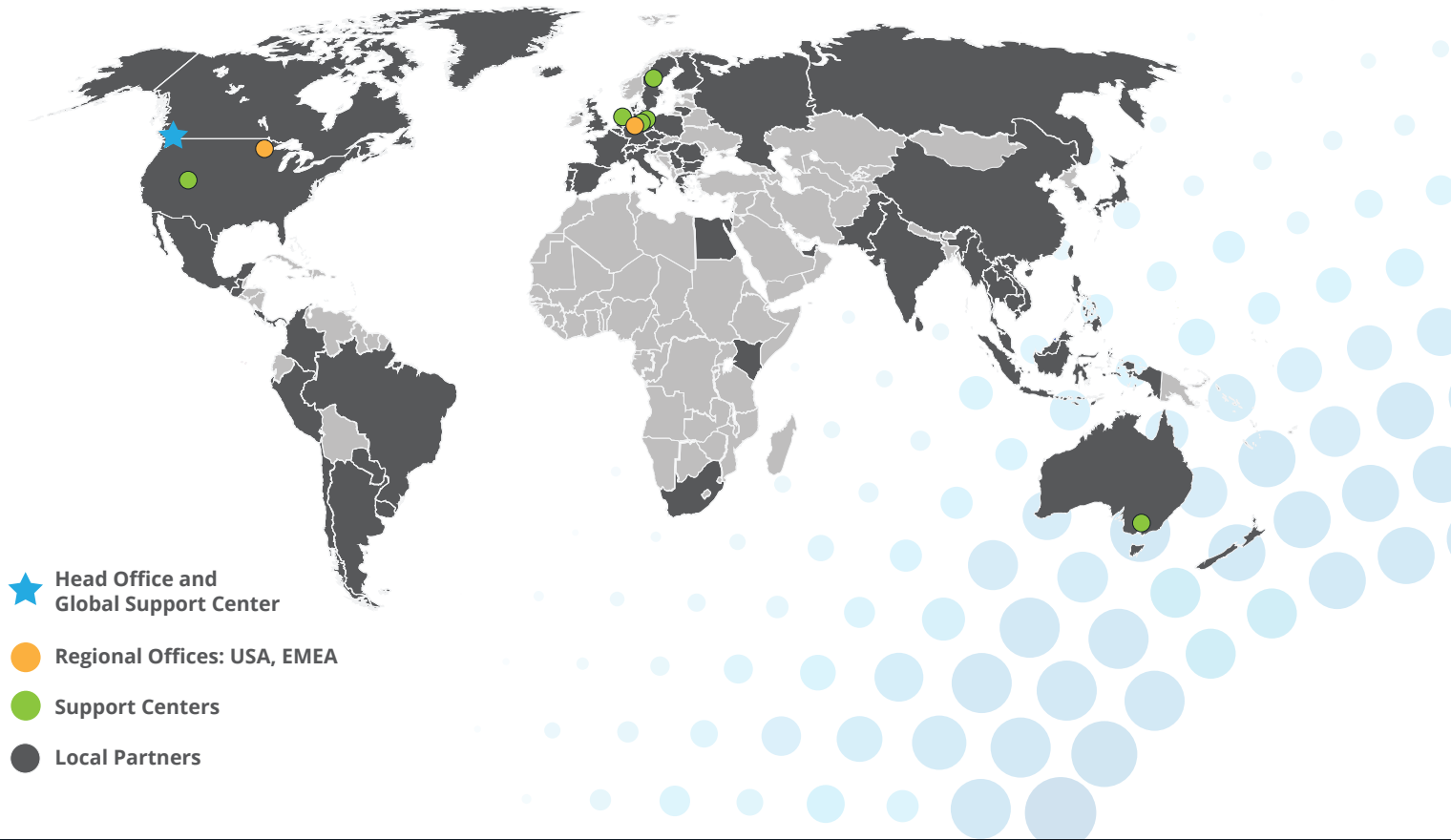
# Custom Battery Packs and Chargers





Cadex specializes in the design and manufacturing of battery packs and chargers. Combining these two capabilities enables us to provide you with a one-stop solution. The most important benefit is matching battery and charger to improve battery performance and extend service life, an improvement that cannot be realized with separate designs.

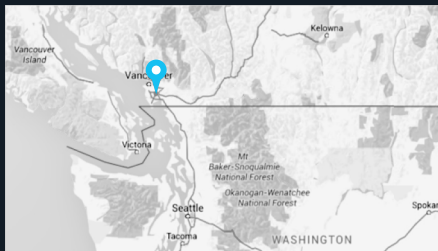


- 25+ years experience analyzing batteries of all types in mission critical applications
- Deep understanding of issues and problems with many pack designs provides unique insight into design requirements
- Customized solutions tailored to difficult and complex requirements (Medical, Intrinsically Safe etc)
- Sophisticated BMS designs including custom firmware for data collection and monitoring during research and development stage
- Rugged custom enclosures
- Li-Ion, NiCad, NiMH chemistries
- Range from 3.6 to 90+V, 10Wh to 5+kWh
- Test Laboratory
  - Well equipped labs for testing and characterization of individual and fleets of batteries in North America and Europe
  - Battery and cell characterization
  - Lifecycle testing services
- Rapid prototyping of design concepts
- Tight integration between battery pack and charging system optimizes life of battery while maximizing safety.






# Global Presence

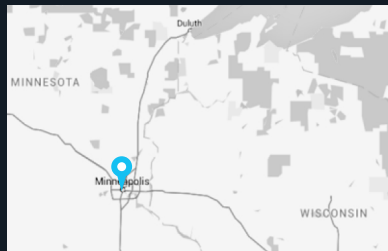


-  **Head Office and Global Support Center**
-  **Regional Offices: USA, EMEA**
-  **Support Centers**
-  **Local Partners**







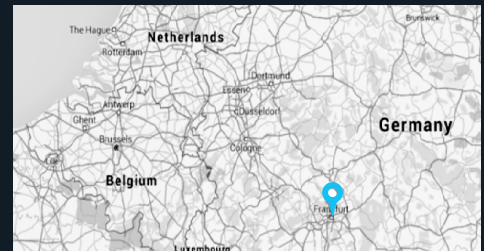
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Visit our Battery Knowledge Portal:

 <http://www.BatteryUniversity.com>

Visit our website:

 <http://www.cadex.com>



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