

Nickel Cadmium

Cornerstone's associated factories manufacture a broad range of custom nickel cadmium battery packs and assemblies. Nickel cadmium (NiCd) is a well-established chemistry for rechargeable batteries. While newer chemistries have become increasingly popular in recent years, nickel cadmium remains a viable, dependable option for many applications.

Our battery design team uses the latest technology and electronic design tools to optimize the reliability, safety, and manufacturability of your custom batteries. This ensures that you receive the most cost-effective and dependable nickel cadmium battery pack solution for your specific needs.

Nickel cadmium batteries offer several advantages over other battery chemistries currently in use. Nickel cadmiums can take a fast charge, in as little as 15 minutes for some, and can take a charge at lower temperatures. Nickel cadmiums can sustain heavy loads and, when properly maintained, are capable of thousands of charge cycles. They are also an inexpensive option compared to some newer battery chemistries.

Please visit our [Custom Battery Pack](#) page for information on custom Ni-Cd battery packs and assemblies.

Most nickel cadmium batteries for portable applications are either spiral-wound cylindrical cells or button cells. Several types of electrodes can be used in nickel cadmium cells, such as sintered, plastic bonded, foam, and others. By combining different types of electrodes in a single cell, Cornerstone and other battery pack manufacturers can create nickel cadmium battery cells that deliver unique advantages over other types—they may be tailored for high discharge, fast charge, long-term float or trickle charge, extra capacity, or performance at high temperatures.

Applications for NiCd battery packs include: cameras, data terminals, memory backups, hobby remote controls, notebook PCs, portable phones, portable printers, portable TVs, transceivers, CD players, emergency systems, security systems, security lights, data terminals, power tools, vacuum cleaners, electric shavers, office equipment, toys, video cameras, and many others.

- Cell voltage: 1.2V (nominal)
- Capacity: 11 mAh to 20,000+ mAh
- Energy by weight: 40-60 watt hour/kilogram
- Discharge characteristics: (recommended drain mA to amperes)
- Cycle life: 500-5,000 cycles
- Self-discharge: 20% per month
- Operational temperature range: -40°C to 60°C
- Preferred charge method: constant current (-D V fast)
- Sizes: widest selection of cylindrical and button sizes of any battery chemistry