

Key Features of the C7000 C-Series platform

Date: 25 May 2006 (revised)

By: Isidor Buchmann

For: Product introduction, training for Reps and Resellers

To keep up with advancing technology, our engineers rebuild the C7000 Series battery analyzers every five years. This has occurred again with the new Cadex C7000 C-Series, the third generation since this platform was first introduced in 1995. Here are the most significant features that we have included:

1. **QuickSort™**. This new program checks the state-of-health of cell phone batteries and sorts them into the classifications of: *Good*, *Low* and *Poor*. The typical test time is 30 seconds.
2. **Four-wire system**. Also known as Kelvin, this battery interconnect system compensates for wire and contact losses and improves test accuracies, especially on QuickSort™. As of June 2006, all new Battery Adapters will be built on a partial 4-wire system. Contact Cadex for full Kelvin.
3. **Improved OhmTest**. The new OhmTest no longer applies charge and discharge pulses; instead it but obtains its readings from discharge pulses only. This prevents activation of the protection circuit on a fully charged lithium-ion packs.
4. **Higher definition**. The switch to a 16-bit A/D converter from the previous 12-bit system provides a four-fold increase in data capture. The benefit is higher accuracies and more repeatable test results.
5. **Battery insertion counter**. Wear and tear on the battery contacts cannot be avoided. The C-Series keeps track of battery activity and prompts the user to calibrate the adapter after every 300 insertions. The ensuing calibration reveals the contact resistance and alerts the users to replace worn contacts.
6. **Improved fault tolerance**. The current-sensors have been moved from the negative to the positive leads. This prevents damage if the battery leads are inadvertently cross-shorted. The new circuit enables faster regulation, provides pure DC discharge and displays the voltage more accurately.
7. **Enhanced charge algorithms**. These refinements provide shorter charge times by keeping the batteries cooler.
8. **Simplified hookup**. The USB port makes PC connectivity more convenient. (Note: Applications requiring reliable connectivity should use serial port. Print function in stand-alone is only available through the serial port.)
9. **RoHS and WEEE compliant**. The C-Series analyzers will meet the 2006 European requirements. (RoHS stands for Restriction of Hazardous Substances; WEEE is Waste Electrical and Electronic Equipment). This requirement comes into effect in Europe by July 2006.
10. **Secure Memory**. This feature will prevent unauthorized copying of intellectual property by a third party. The programming file is encrypted and cannot be easily read.