

### C 15

- Dual Negative Pulse Charge
- Eliminates memory effect
- Increases battery cycle life
- Conditioning while charging
- 1- or 3-step deep conditioning cycle selectable by push button
- Fast charge, with equalizing
- 100% charged with green LED
- Easily replaceable adapters
- Robust, anodized aluminum enclosure and adapters
- Completely silent (external PSU)
- Direct 24V vehicle power input
- Manufactured in the EU (ISO9000)

### CM 25

Additional to C10 features:

- Two independently working charging stations
- Mounting brackets for in-vehicular use, or rubber brackets for desktop use

### CM 35

Additional to C10 features:

- Three independently working charging stations
- Capacity check
- Maintainer mode for safe storage of batteries over longer periods of time
- LCD display for status indication, capacity readings and settings
- Real-time clock
- Automatic detection of battery ID and logging of statistical data (on certain types of batteries only)
- Computer interface (RS-232)

### CM 65

6 independently working charging stations. Same features as for model C35.

Adapters are available for a wide range of batteries and chemistries, including ATEX (Cenelec) batteries. Check out our web site for an updated list of available adapters.

Unitech Energy can provide you with custom designed power supplies and battery chargers.



### SmartMonitor

Monitor and remote control of your **SmartEx™** charger via LAN (models CM35/CM65/CM105)



### SmartEx CM 105

Custom design charger for 10 batteries, incl. display, 5A pulse charging & conditioning/balancing.



### SmartAdapter

Unitech Energy can provide you with custom designed adapters for the **SmartEx™** charger.



### SmartEx Mobile

Custom design **SmartEx™** charger for 4 batteries, incl. display, 5A pulse charging & conditioning/balancing

For rough environment. Waterproof down to 10 meters when the case is closed.

**For more information about SmartEx™ or other products, please contact us:**

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# SmartEx™

Battery charger and analyser...



*...the battery's favorite choice*



## SmartEx™ provides uncompromised safety to two-way radio communication

Safety is the paramount issue for the radio user. The battery must perform reliably in a critical situation. Poor batteries should be identified and immediately conditioned, or taken out of service.

**SmartEx™** provides ease and efficiency for the end user, in making sure that batteries are properly charged, conditioned as they are charged, and regularly checked for sufficient capacity. If necessary, a 3-step reconditioning process is available at the touch of a button. The Dual Negative Pulse Charge (DNPC) algorithm ensures optimum battery life cycle and available capacity on a day-to-day basis, by conditioning the battery as it is charged.

## Software Upgradeable Adapters for full flexibility

Adapters include non-volatile memory as storage for charge algorithms. Optimized charge algorithms are available for NiCd, NiMH and Li-Ion chemistries. The software may easily be modified/ upgraded by downloading new software from our customer support web pages, and uploaded to the charger (CM65/CM35) via the built-in computer interface.

### Computer interface RS232



SmartEx™ Adapter

## Battery maintenance made easier No memory effect – no maintenance required

Applying a negative pulse charge algorithm (on nickel based chemistries), memory effect or other detrimental side effects are no longer an inherent part of battery charging. Studies show that using regular charge methods on nickel based batteries, regular maintenance/conditioning is required; otherwise the batteries face a substantial loss of capacity after just a few months in service.



Heidrun, Statoil

# SmartEx™

4th generation charger  
with conditioning and analyzer features

### DNPC™

Dual Negative Pulse Charging™ provides the most efficient conditioning available, while charging. Recommended for every-day use.

### Maintainor Mode

When batteries are stored in the charger for weeks and months, it is important that they are periodically discharged and recharged. This happens automatically in the **SmartEx™** charger, at a settable interval of days. Additionally, the batteries always receive an automatic, non detrimental maintenance charge once every 24 hrs.

### Battery Management

Through the onboard LCD display (models CM35 – CM105) you may follow up an entire fleet of batteries. The LCD displays charge/discharge curves, amps per hour charged/discharged, instant values of current and voltage, menus for various settings and statistics for each individual battery.

### Reconditioning

Batteries that are regularly charged by the **SmartEx™**, are both charged and conditioned at the same time, which eliminates the need for separate reconditioning. In the case that the batteries have been charged regularly in standard chargers, extra reconditioning is available at the touch of a button.

### Cost benefits

Conditioning while charging, keeps the battery clean and in optimum condition on a day-to-day basis.

The benefits are obvious:

- No need to buy expensive conditioners/analyzers.
- The tedious labour involved in collecting poor batteries, running a time-consuming reconditioning process and subsequently distributing the batteries back into service, is all history.
- The batteries live longer
- No need to replace the charger as new radios or new battery chemistries are introduced.

### Capacity check done by the end user

- Checking the battery capacity never was easier. It's a serious safety issue, having poor batteries in service.
- At the touch of a button, the battery is cycled 1 or 3 times (selectable). On models CM35 and CM65, the measured battery capacity/capacities of all batteries may easily be monitored on the built-in LCD display.
- The ease of use, eliminates the need for specially trained personnel using special analyzing equipment for this job.
- At whatever interval preferred, the batteries may be checked by the end user, and taken out of service if capacity too low.