Product Sheet

# Battery Chargers

## Scope

All types of *Battery* Chargers may apply for the *GEEA Label*. However, the charger should be sold as a separate product, i.e. not as part of an appliance, e.g. mobile phone. In the case the wall pack is sold as part of an appliance, the criteria for that appliance should be met.

## Criteria

Battery Chargers are eligible for the GEEA-Label if the following criteria are met:

| Category | Criteria | Criteria valid till* |
|---|---|---|
| Battery Charger | The power consumption in standby mode is **1 W** or less and no manual interaction of the user has to be performed if the load is re-demanding a power consumption from the *Battery Chargers* after a duration of low power consumption. | 31.12.2003 |

* See Rules of Registration Procedure

## Definitions

| Term | Definition |
|---|---|
| *Standby* | The operation mode in which the Battery Charger is connected to the mains with a full load in place and has finished its charge cycle. |

## Test method

1. Testing requirements

1.1 Testing area

Measurements are to be carried out in a testing area that is free of draughts and has ambient temperature of 22°C ±4°C. All components of the device to be measured must be at room temperature.
For measurement purpose, the device must be placed on a level surface at a distance of at least 50 cm from each wall or obstacle.

1.2 Measuring device

For measuring the effective power consumption, a measuring device must be used that:

a. automatically calculates the average power consumption during a time interval; or

b. carries out a time measurement parallel to the energy measurement, from which it is possible to numerically calculate the average power consumption.

The maximum permissible relative measurement error for both the power consumption and the energy consumption is 5%.

1.3 Main voltage and frequency

The device to be measured must be operated on a mains supply at rated voltage [$V_{AC}$] and rated frequency [Hz]. The permissible deviation is ±2% for the supply voltage and the mains frequency. The alternating current must be a sinus wave with harmonic distortion not exceeding 5%.

2. Testing procedure

The *Battery Charger*, as shipped by the manufacturer, is connected to the mains. The full load for which the *Battery Charger* has been designed is connected to the charger. It has to be waited until the charge cycle of the load has been finished. Then measure the power consumption of the *Battery Charger*. The measuring time should be sufficiently long to calculate the correct average power consumption value. The power consumption value is to be indicated in Watts [W], rounded to the first digit after the decimal point.