



21st Century  
**Heating** 

**CENTRAL HEATING WITHOUT PIPES**

[www.21stcenturyheating.com](http://www.21stcenturyheating.com)

## 21st Century Heating Electric Central Heating Systems

### Data Sheet 3:02 - BSRIA Test Running Cost Comparison:

The Test Data collated has been converted to show a comparison in a normal domestic situation requiring "comfort heat" between 6am to 9am in the morning and between 6pm to 11pm in the evening - 8 hours per day. (In a normal home, consumption would be lower but the variation would be relative)

E7 storage heater

#### **23.8 kw/h off-peak store @ OFF-PEAK TARIFF**

This stored heat as shown in data sheet 3:01 will provide heat no matter what from the time that it commences its' charge. It is sufficient to provide comfort temperature between 6am to 9am without additional heat sources, but will then continue emitting heat during the day when no-one is at home.

However, as shown in data sheet 3:01, additional heat would be required between 6pm to 11pm from the fan convector to maintain the comfort temperature.

Fan convector on E7 storage heater = 5 hours producing heat for 50% of the heat loss (in this instance 1374 watts per hour), equates to 0.687kw/h x 5 hours = **3.435 kw/h @ PEAK TARIFF**

**Therefore, the total cost for the storage heater in this situation would be 23.8 units of electricity at off-peak and 3.435 units of electricity at peak tariff.**

21st Century Heating Systelia Cyclope radiator – using "standard tariff electricity"

At a heat loss of 1374 watts per hour x 8 hours = 10.992 kw/h

#### **10.992 kw/h @ STANDARD TARIFF ELECTRICITY**

**Therefore, the total cost for the 21st Century Heating radiator in this situation would be 10.992 units of electricity at standard tariff.**

**The 21st Century Heating radiator in this situation uses over 59% less electricity than the storage heater.**

**The 21st Century Heating radiator in this situation would cost over 32 ½ % less to run than the storage heater.**

21st Century Heating Systelia Cyclope radiator – using "Economy 10 tariff electricity" From Scottish & Southern

At a heat loss of 1374 watts per hour x 8 hours = 10.992 kw/h. With Economy 10 from Scottish & Southern the home owner would benefit from 2 hours of off-peak electricity between 8pm to 10pm.

**Therefore, 6 hours x 1374 watts = 8.244 kw/h @ PEAK TARIFF**

**Plus 2 hours x 1374 watts = 2.748 kw/h @ OFF-PEAK TARIFF**

**Therefore, the total cost for the 21st Century Heating radiator in this situation would be 8.244 units of electricity at peak tariff and 2.748 units of electricity at off-peak tariff.**

**The 21st Century Heating radiator in this situation uses over 59% less electricity than the storage heater.**

**The 21st Century Heating radiator in this situation would cost over 36 ½ % less to run than the storage heater.**

\* Standard Electricity, Economy 7 peak & off-peak, Economy 10 peak & off-peak unit prices used for this comparison are for electricity costs based on Scottish & Southern tariffs as at 20/06/08 and include VAT. All unit prices are based on monthly payment by direct debit. Daily standing charge excluded.