

# Running Costs

Heatstore Dynamic Quantum is recognised in the recently released SAP2012 (The Government recommended system for measuring the energy performance of residential dwellings) as being up to 27% cheaper to run, and using up to 22% less energy than a standard storage heater. This is mainly due to its improved insulation and extremely advanced controls. Quantum is categorised as a 'High heat retention storage heater' within SAP2012, and will be included in the RdSAP revision in Spring 2014.

There is often confusion about the running costs of electric heating compared to other fuels, yet this is something that is more straight forward to model. The real annual cost of the system must take into account not only the fuel used but the cost of maintaining the system. The table below has been constructed using SAP software updated with SAP2012 parameters and shows comparative annual costs for four different property types. However what the model does not consider is which electricity tariff will be used, what temperature the thermostat has been set to, how long the heater will be on for and what the weather will do!

Home Type	Heating System	Space Heating Energy Demand	Main Off Peak Energy Use	Secondary Peak Rate Energy Use	Boiler/ Heater Annual Efficiency	Space Heating Cost	Annual Service Cost	Ancillaries Cost	Total Running Cost
1 Bed Flat	Quantum	3566 kWh	90%	10%	100%	£255.06	-	£2.45	£257.51
	Gas	3678 kWh			84%	£272.37	£75	£15.83	£363.19
	Oil	3678 kWh			84%	£238.18	£90	£29.02	£357.20
	LPG	3678 kWh			84%	£402.75	£75	£15.83	£493.58
2 Bed Flat	Quantum	3990 kWh	90%	10%	100%	£282.52	-	£2.45	£284.96
	Gas	4113 kWh			84%	£290.42	£75	£15.83	£381.24
	Oil	4113 kWh			84%	£266.40	£90	£29.02	£385.41
	LPG	4113 kWh			84%	£442.13	£75	£15.83	£532.96
2 Bed Mid-Terrace	Quantum	4308 kWh	90%	10%	100%	£303.12	-	£2.45	£305.56
	Gas	3973 kWh			84%	£284.61	£75	£15.83	£375.44
	Oil	3973 kWh			84%	£257.33	£90	£29.02	£376.35
	LPG	3973 kWh			84%	£429.50	£75	£15.83	£520.33
3 Bed Semi-Detached	Quantum	6681 kWh	90%	10%	100%	£456.86	-	£2.45	£459.31
	Gas	6231 kWh			84%	£378.13	£75	£15.83	£468.96
	Oil	6231 kWh			84%	£403.52	£90	£29.02	£522.53
	LPG	6231 kWh			84%	£633.74	£75	£15.83	£724.56

Energy and running cost comparisons calculated using SAP 2012 version 9.92 (May 2013)

Annual service cost source: "Which" 2012

Ancillaries include: central heating/oil burner pump, flue fan, Quantum fan