Observed Power Consumption of new Mitsubishi Mr. Slim Systems
By Rod Paine September 29, 2010 © 2010 ALL RIGHTS RESERVED

Background
As shown at my web site addressing the installation of two Mitsubishi Mr. Slim split system ductless air conditioner systems, I have completed documentation on our efforts to quantify the operating cost savings these systems have provided, over the main summer cooling period of July, August and September 2010, compared to the same periods during 2008 and 2009. I fully realize that this single cooling season period of monitoring energy consumption of these systems is not an all inclusive indicator of what the operating costs may be over the life of these products. But, this report does identify what the costs savings have been, in my environment. Further, since I was unable to obtain any specific information from other Mitsubishi users, in terms of energy consumption during the cooling seasons, I feel this simple report will help others in understanding what the potential is, for saving on summer cooling costs, as savings are clearly evident in my own case.

As luck would have it, July 2010 was a near record breaking month, with its 20 days of 90°F or above temperatures and brilliant sunny days, so these units were heavily used, running 24 hours a day on many days. Further, because we wanted to "stress test" these systems, we set them to keep the house at a nice cool 72°F and 48-50% humidity. I made no attempt to run the thermostats higher, at 78°F which we set our earlier window air conditioners at, all the time in previous years.

Here is my summary of the results, compared to the 2008 and 2009 energy use of the 18.7k btu and 14k btu window air conditioners (installed 1984) that the Mitsubishi 15k btu and 12k btu systems replaced.

Date	Month Avg. Temp	Thermostat Setting	kWh Used	Cost
July 2008	87.6°F	78°F	1206	$135.11
Aug 2008	85.2°F	78°F	1181	$135.58
Sept 2008	79.4°F	78°F	878	$101.11
July 2009	85.5°F	78°F	1057	$120.10
Aug 2009	88.6°F	78°F	1098	$123.99
Sept 2009	77.9°F	78°F	797	$ 94.45
July 2010	90.8°F	72°F	879	$ 93.89
Aug 2010	86.8°F	72°F	882	$ 94.14
Sept 2010	84.6°F	72°F	700	$ 75.97

Month average temperature data comes from the NOAA Preliminary Local Climatological Data (WS Form F-6) for these three years, as recorded at Dulles International Airport weather monitoring facility, Dulles, VA,

If you have comments or questions, please contact me.

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