





| 2011  |  | Pro and con tankless water heater   |   |   | http://waterheatertimer.org/pro-n-con.html   |   |  |  |
|---|--|---|---|---|--|---|--|--|
| Type of heater  | Saves energy   | Unlimited hot water?  | Easy to convert   | Water pressure  | Particulate in water   | Life Expectancy   | Can be integrated with solar, geothermal, heat-pump or other energy source   | Temperature adjustment   |
| Whole house tankless electric<br>  | No savings<br>Can cost more.<br>Hard for electricity to heat water as water rushes past in pipe. <a href="#">See image</a> | -Yes- When unit not undersized with optimal conditions<br>-Not consistent with saving energy or water<br>-No hot water in power outage        | No,<br>- Requires 90-120 Amps<br>- Typical home electric service is 150-200 Amps (check main breaker to see amps of your service)<br>- Upgrade service panel to convert to tankless electric.<br>-Homeowner install not recommended     | 1/2-3/4 gal per minute water flow before heater turns on<br><br>Low pressure causes tankless to shut off elements | High tech sensors will clog and fail in 2 years without softener <a href="#">Read .pdf</a><br><br>Susceptible to lime build-up. De-lime each year                    | Claims of longer life not backed by warranty.<br><br>No warranty without plumber trained by specific manufacturer. <a href="#">Require surge protector</a>                              | No<br>-Cannot store heat from other source<br><br><u>Cannot heat and store water during off peak</u><br>-Always demand fossil fuel | -Temperature adjustment with dip switches. <a href="#">Read Page 4</a><br><br>Adjusting temperature can shut down elements if water cannot heat fast enough. |
| Whole house tankless gas<br>       | Saves \$1-\$8 per month <a href="#">See hidden costs</a>   | -Yes- When unit not undersized with optimal conditions<br>-Not consistent with saving energy or water<br>- No hot water in power outage       | No,<br>Requires 1-1/4" gas pipe<br>Requires air intake pipe<br>Requires stainless-steel flue<br>Requires 110V electric line<br>Requires professional installation<br>Located farther from faucets<br>-Homeowner install not recommended | 1/2-3/4 gal per minute water flow before heater turns on<br><br>Low pressure causes tankless to shut off burner   | High tech sensors will clog and fail in 2 years without softener <a href="#">Read .pdf</a><br><br>Susceptible to lime build-up. De-lime each year                    | Claims of longer life not backed by warranty.<br><br>No warranty without plumber trained by specific manufacturer.<br><br>Not protected by FVIR <a href="#">Require surge protector</a> | No<br>-Cannot store heat from other source<br>-Always demand fossil fuel   | -Temperature adjustment with dip switches. <a href="#">Read Page 4</a><br><br>Adjusting temperature can shut down burner if air, fuel and vent don't match.  |
| Regular electric water heater<br> | You can save 4-9% operating cost by insulating tank <a href="#">See how</a>  | <u>Can heat and store water during off-peak</u><br>-Heats 21 Gal per hour <a href="#">See chart</a><br>- Stored hot water available any time. | Regular electric water heater can be installed by homeowner   | Hot water available with any flow or pressure<br><br><u>Allows water conservation</u>                             | Regular flushing maintains tank <a href="#">See how</a><br><br>'Self-cleaning' tanks available<br><br>Corrosion-fighting anode rod inside each unit                  | 6-12+ years<br>-No extended warranty without professional installation.<br><br>-Homeowner can diagnose and repair same day using locally-available interchangeable parts                | Yes<br><br>-With minor pipe changes, storage water heaters store heat gathered from other sources <a href="#">See options</a>      | -Simple to adjust temperature. <a href="#">Read</a>  |
| Regular gas water heater<br>     | You can save 3-5% operating cost by lowering thermostat 10° <a href="#">See how</a>  | -Heats 41 Gal per hour <a href="#">See chart</a><br>- Stored hot water available any time   | Regular gas water heater can be installed by homeowner<br><a href="#">How to install gas water heater</a>   | Hot water available with any flow or pressure<br><br><u>Allows water conservation</u>                             | Regular flushing and clean burner maintains tank <a href="#">See how</a><br><br>'Self-cleaning' tanks available<br><br>Corrosion-fighting anode rod inside each unit | 6-12+ years<br>No extended warranty without professional installation.<br><br>Homeowner can <i>usually</i> diagnose and repair using locally available parts<br><br>Protected by FVIR   | Yes<br><br>-With minor pipe changes, storage water heaters store heat gathered from other sources <a href="#">See options</a>      | -Simple to adjust temperature. <a href="#">Read</a>  |

