Uninterruptible Power Supply (UPS) information

An Uninterruptible Power Supply, or UPS, is a battery powered device that plugs into a wall socket to get standard 120 volt current. On the output side, there are receptacles into which you plug your appliances (load). When the power is on, the batteries in the UPS are charging and your load appliances are running off the house power. When the house power goes out, the load is automatically transferred to the batteries. The size of the batteries and the electronic circuitry determines how long the load appliances will keep running. Batteries are rated in VA, volt-amps or W, watts. The UPS will show the rating like 450VA/225W or 1000VA/600W.

The times printed in the Resident's Guide are not accurate.

No Magic Formula

It would be nice to provide a universal mathematical formula for calculating UPS runtime based on a power consumption, but there are so many variables to consider that there's no way to provide one with any accuracy. (Be wary when researching this topic on the Internet, because there's lots of misleading and contradictory information out there.) Your best bet is to find the power consumption of your gateway and router — often expressed in watts — on their power supplies and then check the UPS manufacturer's web site for an estimated runtime chart for a particular model you're interested in.

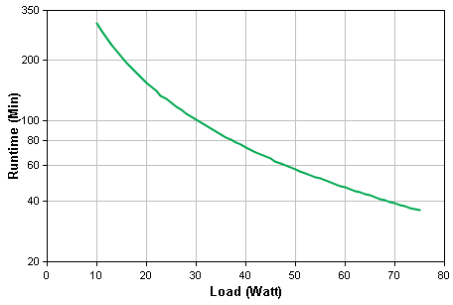
An average Cable Modem will draw about 6-10 watts. An average cordless phone base station will draw about 2-4 watts.

Using a higher end number of 20 watts combined, a typical 650VA / 390W UPS should keep your modem and phone running for 3 hours, but inefficiencies will reduce that number, probably to 2 hours.

Runtime Chart:							
Watts	**50**	**100**	**200**	**300**	**400**	**Full**	**Half**
VA~	**80**	**160**	**320**	**480**	**640**	**Load**	**Load**
BE650G1	1 hrs 5 min	29 min	12 min	6 min	-	3 min (390 Watts)	12 min (195 Watts)

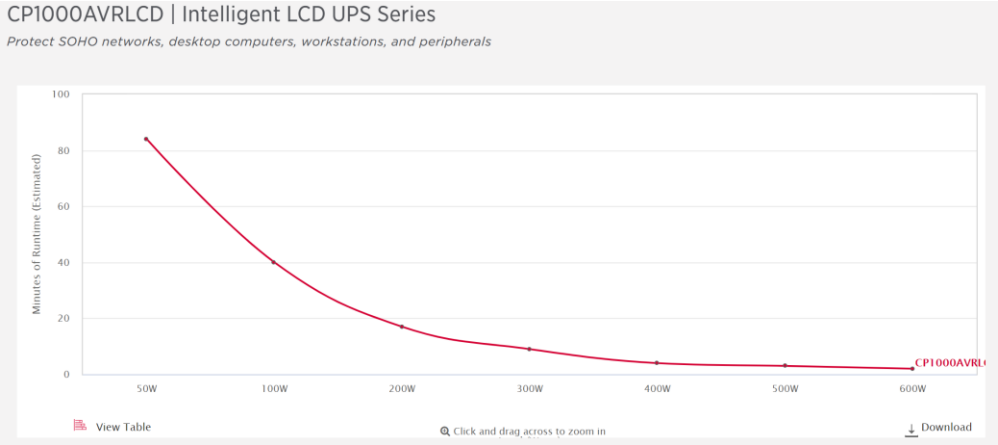
Some UPS models have special circuitry that claim to be designed specifically for low power loads and will run longer.

One such UPS is the APC Back-UPS Connect BGE90M which claims to provide 4.5 hours of network modem power. Reviews suggest that this is true.



This BGE90M UPS is available on Amazon (May 2019) for about $100. At the manufacturer's store, APC, the price with delivery and tax is about $75.

A larger UPS that will keep you modem, phone and a laptop running for a while is CyberPower CP1000AVRLCD Intelligent LCD UPS System, 1000VA/600W, 9 Outlets, AVR, Mini-Tower available on Amazon for $110. Laptops vary widely in their power requirements. A 14" might draw as little as 50 watts and a high-end 17" might draw 150 watts.



Many other brands and models are available, these are just ones that we have tested and know to be good values.

https://smile.amazon.com/APC-Back-UPS-Connect-BGE90M-Charging/dp/B00NTQYUA8/ref=sr_1_1?keywords=bge90m&qid=1558709290&s=electronics&sr=1-1

https://www.apc.com/shop/us/en/products/APC-Back-UPS-Connect-90-120V-Network-backup-USB-charging-ports/P-BGE90M?&utm_source=google&utm_purpose=marketo&utm_campaign=Distributed_Networks_DSA&utm_term=back_ups_connect&mrkgcl=986&mrkgadid=3256126914&rkg_id=0&adpos=1t1&creative=269259981029&device=c&matchtype=b&network=g&gclid=Cj0KCQjwrJ7nBRD5ARIsAATMxsu-gr16jHumUJMDX6BAgUwH3x59gvRd7WTYYFsR9mw6by51yftDV8MaAjSGEALw_wcB&gclsrc=aw.ds#xtor=SEC-752-GOO-[52456362607]-[269259981029]-S-[]

https://smile.amazon.com/CyberPower-CP1000AVRLCD-Intelligent-Outlets-Mini-Tower/dp/B000QZ3UG0/ref=asc_df_B000QZ3UG0/?tag=hyprod-20&linkCode=df0&hvadid=198138936631&hvpos=1o1&hvnetw=g&hvrand=7150601519783546518&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9032017&hvtargid=pla-351184915388&sa-no-redirect=1&th=1