

Valence N-Charge VNC130 External Laptop Battery Reviewed

By **Jason Dunn** on Wednesday, October 18, 2008



Product Category: External Power Supply

Manufacturer: Valence

Where to Buy: Direct from Valence

Price: \$299 USD

System Requirements: Compatible with a variety of laptops with the appropriate adaptor.

Specifications: 16-24 V DC, 10 Ah, 120-130 Wh, 13 mm/.5118 inches thick, 300 mm/11.81 inches long, 230 mm/9.055 inches wide, 1.35 kg/2.976 lbs. in weight.

Pros:

- Greatly extends battery life of a laptop;
- Easy to use, effective design;
- Long life cycle, will last.

Cons:

- Fairly expensive;
- No USB ports for portable device charging;
- Expensive, proprietary cable design.

Summary:

The Valence N-Charge VNC130 is an extremely powerful external battery that gives you the ability to drastically extend the battery life of your **laptop** when away from a power supply. It works amazingly well, especially when paired with a thin and light laptop already designed for maximum battery life. The overall package is held back somewhat by a hefty price tag, lack of USB ports for charging small electronics, and an expensive and inflexible proprietary cabling system - but I still won't leave the N-Charge behind when I travel after it proved its worth to me.

I Admit It, I Have A Battery Fetish

Battery life. If you use any sort of electronic device – camera, audio player, laptop, cell phone, PDA – battery life is something that you think about...especially if your device is completely dead. I was told by a mobile device product designer that battery life has been increasing by 8% per year over the past several years, and he seemed to think that was pretty great news. It might be, but I certainly don't feel like my mobile devices last long enough on a charge. We need exponential battery growth – like a laptop going from lasting 6 hours to lasting 60 hours on a single charge – before we can breathe easy about battery life and not have to think about it so much.

The N-Charge from Valance aims to change that, at least for laptop owners, by providing a portable battery that gives you a power boost when you're away from a wall socket. Battery life is the overriding concern for me when I look at laptops – in fact, my past two small laptops have been Fujitsu P series (5000 and 7000) units for one main reason: the optical bay can be removed and replaced with a second battery, and with two batteries the P series laptops can get 10 to 11 hours of battery life on a single charge. For a small and light laptop whose primary purpose is email, writing, and Web access, battery life is what matters to me most.

The Battery Basics

I've seen people with those big, flat batteries before, but I'd never gotten around to really looking seriously at them until recently. After some research looking at the different brands out there, I decided that the N-Charge products from Valance Technology looked the most promising. The N-Charge products use a system Valance calls Saphion, which incorporates phosphate based cathode material instead of the cobalt-oxide cathode material that traditional Lithium Ion batteries use. What that means to the product is higher performance, more safe and stable chemistry, long life cycle with more charge/discharges, and a flexible form-factor. I looked at the VNC-130, which is their most heavy-duty battery. It weighs in at 3 pounds, making it nearly as heavy as my laptop. It's about 0.5 inches thick, 11.8 inches wide, and 9 inches tall. There's a connection port on the top, with a proprietary connector that links into the battery.

Two cables come out the removable connector – one end plugs into the laptop, and one end accepts AC power from the laptop's power supply. There are no removable tips – you need to purchase a cable that will only work with your make/model of laptop (at \$49.99 a pop – ouch!). There's also no way to recharge the N-Charge from a wall socket unless you have the laptop's power AC power supply with you. There's a button on the top of the N-Charge that, when pressed, gives you a five-bar readout of the power level on the battery. This is very useful, as it gives you a rough idea of how much juice is left in the battery. The VNC-130 boasts 120 to 130 Wh (watt hours) of power, takes 3-4 hours to recharge from zero, has a capacity of 10 amp hours, and has a high-power port voltage of 16 to 24 volts DC. It will power any laptop up to 15.4 inch screen – 17 inch screen laptops tend to require too much power (even my Pentium 4 M-based Fujitsu N6220). That's a lot of techno-babble – so does this thing actually work? In a word: yes.

So How Does It Really Work?

I'm a big believer in real-world testing, so I took this product with me on my trip for Mobius Thailand 2006. I carried the battery in my laptop shoulder bag (a RoadWired Skooba Seventeen+), so I felt the heft of carrying a four pound laptop and a three pound battery – along with at least eight more pounds of books, cables, and gadgets – a total of nearly 50 pounds both ways travel time and layovers. Do I wish the N-Charge was lighter? Sure. Would I leave it behind on my next trip? Not on your life – it worked superbly. On the full day of

the Mobius conference, I booted up my Fujitsu P7010D at 9 am and connected it to the N-Charge. Screen brightness was set to 50% (quite bright for the room), WiFi was turned on and connected to an access point, and off I went. I wasn't compromising with my work style that day – I treated the laptop exactly as I would if it were connected to AC power. I used it aggressively, including using the memory card reader pulling images off a CompactFlash card. The laptop was configured to never go into standby, and only turn off the monitor and hard drives after 30 minutes without use (which never actually happened given the schedule).

At the end of the conference day (5:47 PM) nearly nine hours later, the laptop was still running off the N-Charge – it hadn't even touched the internal batteries! I was extremely impressed by this result, because it means I could probably have gotten another 90 to 120 minutes out of the N-Charge before needing to rely on the laptop batteries, which would dish up another 8 or 9 hours given the settings I had. Do the math: that's about 20 hours total for my laptop with this battery, and that's real active use, not turning the brightness down so low it's hard to read (which is what most conference-goers do when lacking AC power).



Figure 1: The N-Charge was a perfect companion for my small laptop on an airplane - plenty of space for everything to fit, and massive battery life.

On the way home from Thailand I watched three movies (about 7 hours in total) ripped to the hard drive, at 30% screen brightness, and the N-Charge still had two bars of power left. It's the best three pounds I ever carried on a trip. I seem to have the unfortunate luck of never getting airplane seats with power, so running out of power on long trips is a common problem for me. Now that I have the Valence N-Charge, it's much less of an issue.

Room For Improvement

Like any product I review, however, I think the N-Charge could be improved in some small ways. First, it lacks any sort of secondary charging port. There is a port on the bottom that's supposed to be used for recharging cell phones, but it requires special cables with a proprietary connector. What the N-Charge really needs is to ditch this custom power, then add one (or even two) USB ports for charging. Almost every small electronic device today

can be recharged from a USB port, so for the N-Charge to not have one is senseless. When I was traveling on the plane or sitting in an airport, there were numerous times I needed to recharge portable video/audio players, and it wasn't possible or convenient for me to use the ports on my laptop to do so. My laptop only powers the USB port in standby mode, not when it's turned off, which is a hassle – I would have greatly preferred to use the N-Charge as a charging hub for my USB devices.

The ports on top, and the custom connectors, are also a bit problematic. I was told that in order to minimize standby battery drain on the N-Charge, I shouldn't leave the dongle connected to the port. Fair enough – but that leaves the gold connectors exposed when traveling, and when I returned from Thailand one of them was bent from being carried in my bag. That makes me fear for the long-term durability of the product, though it could be solved easily with the inclusion of a plastic dummy cover for protection. The fact that the cable ends aren't interchangeable (like the iGo Juice) is also frustrating – the N-Charge would be much more useful if it came with six of the most popular connectors and the user could configure it however they wanted.

Conclusions

As you can tell, I really enjoyed using this product. I even find myself using it around my house – it's easier to carry the N-Charge upstairs and use it to recharge my laptop over the weekend several times than to get out my iGo Juice charger and string it to an AC plug. If Valence can add a USB port or two for charging other devices – and bundle a dummy plastic cover for the power port – they'd have a perfect product in my eyes (even if they kept the custom cables). As it stands now, I'd still heartily recommend it to any laptop owner that just never seems to get quite enough power out of their laptop battery.

Jason Dunn owns and operates Thoughts Media Inc., a company dedicated to creating the best in online communities. He enjoys mobile devices, digital media content creation/editing, and pretty much all technology. He lives in Calgary, Alberta, Canada with his lovely wife, and his sometimes obedient dog. He's all about the extended battery life.