

## Mini Review: Pegasus III V90 IR Travel modem Vs the Psion 56K Travel modem

By Graham Foster

IR V90 modem's. What is so special about them? Well an IR modem doesn't need a lead to connect to your IR enabled PDA. That is 1 fewer leads to carry about or (in my case) lose. It is also small and battery powered so it is easy move around with you. Now if you have a laptop or a device with a CF slot on it there are other alternatives. For those of us with Sony PDA's.. well IR is all we have access to. With an IR modem you are free to enjoy 56k connectivity from any landline you can find. High speed surfing, without extremely expensive mobile phones and service contracts. Alongside a PDA, and you have the ideal e-mail / web browsing partnership for the occasional traveller.

Sadly, there are not very many suppliers of these IR enabled modems. Psion was probably the market leader, but stopped producing their 56k Travel modem some time ago. They are now rather scarce on the second hand market / Ebay. Luckily the Pegasus III modem from 3Jtech ([www.3Jtech.com](http://www.3Jtech.com)) is still in production and being continuously improved. It is smaller and lighter than the older Psion modem with improved battery life and built in battery recharge capability too.

### ***Physical attributes,***

The Psion weighs 84 grams (excluding batteries) and the Pegasus just 62grams. As it happens the 3xAA batteries weigh almost exactly the same as the 4xAAA batteries the Pegasus uses (53g for LiMH batteries). The Pegasus is approx 3/4<sup>th</sup> the thickness of the Psion, and marginally shorter and narrower than the Psion too. This makes the Pegasus III probably the smallest and lightest IR enabled modem on the market.

Both are IR or RS232 enabled modems. The Psion auto-detects if you are using IR or RS232. The Pegasus has a small 3 way switch on the back (IR, OFF, RS232). Both use an LED to tell you the state of the battery (Red is low, Green is OK). The Psion also has a green DATA LED which flashes during data transmission / reception. This is surprisingly re-assuring when things are not working as you would expect. Both modems come with a "speaker" so you can hear those all important connection noises modems make to each other. In the case of the Psion though, I could barely hear it, and no amount of messing with initialisation commands boosted the volume to a genuinely audible level. The Pegasus III was fine in this respect. Both modems have a small, universal mains adaptors, but I don't believe the Psion will allow you to recharge any batteries whilst in use, unlike the Pegasus model. Once again the Pegasus mains adaptor was also smaller and lighter. Another win for the Pegasus

The Pegasus modem comes with the required mini-DIN to 9 pin RS232 for PC connectivity.



## **Performance**

**Hardwired RS232:** This is the easiest to check. Installation under Windows was fine, and the Pegasus III gave me the fastest connections I've ever had from a dialup modem. 50666 bps with a transfer rate via FTP which repeatedly peaked at 7.9K per sec. Phenomenal! When hardwired the Psion gave a slightly more "typical" performance, with a transfer rate touching 7k per sec. The actual connection rate was 115200 kbps – which I assume means that it wasn't using V90 properly, and not enabling compression. I was unable to convince it otherwise. Still, both modems gave brilliant performance.

**IR to a Sony Clie PDA.** Well what can I say.. Palm based devices are not known for their wealth of comms diagnostic software, so actual physical transfer rates by IR to these devices are not available. I can say that both modems worked "out-of-the-box" with my Sony NR70V. I tested the transfers with my e-mail (using the Eudora suite for e-mail and web), and both gave respectable and "comfortable" feel to their performance. Both modems felt significantly "slower" over IR than hardwired to a PC, when transferring mail, or viewing web pages. This probably has more to do with a 66Mz Dragonball

processor in the Clie, running rather more slowly than the 600Mz Pentium 3 in my desktop machine! On the whole I would guess that Psion performed marginally better over IR than the Pegasus III to a PDA, but I only have my “instincts” to support that.

### **Battery life**

Psion – about 4 hours continuous use off 2 AA LiMH batteries, Pegasus III, more than 6 hours off 4 AAA LiMH batteries

### **Software**

The Psion comes with Windows drivers and “Easyswitch” for Palm and EPOC devices. This allows you to switch your modem settings between different countries. It also has an “optimise for Palm” feature which remains dubiously undescribed in the Psion documentation. I could not discern any significant difference in the behaviour of the modem from Palm optimised and “un-optimised” set-ups!

The Pegasus comes with the windows driver on floppy and a listing of the AT commands you need for different countries, so you need to become familiar with pTelnet (for Palm) to issue the country code switching.. I confess that it all still seemed to work quite happily even when I forgot to switch country codes. but who knows what the magic of the AT commands are supposed to do.

### **Pros and cons**

Psion is an obsolete IR modem that is still a great performer. It has the PDA based EasySwitch software which feel more professional than hacking about with the AT command set, although both the modems seem to be smart enough for this not to be a major issue.

The 3Jtech Pegasus III has a slightly “cheap” feel to its silver finished plastic case. The hard plastic ridges on the bottom of the case (part of the battery holder), means the Pegasus modem easily slides around due to the tension in the phone lead.

The Psion is also plastic, but as it is black, it just feels to be higher quality. It also has nice rubber feet which hold it more securely on hard surfaces. This is a small point, but as IR is fairly directional, it can be important that things stay pointing where you want them to.

Sadly my Pegasus III arrived with a defective power adapter (wasn't rated adequately for 240V) ,but it ran quite happily off an Argos generic adapter. 3Jtech have assured me that the latest Pegasus models will have rubber feet, and they are changing their supplier of power adapters. (I look forward to my replacement.. hint!). The Pegasus III is still under active development and they upgraded their firmware (July 2002) to improve their battery life by using an automatic “sleep” mode when idle. I'm assured that development is ongoing and we can look to further improvements in performance in the future..

### **Final statements.**

The Psion sells for about £50 on the second hand market – if you can find one. The Pegasus III is still in production and can be bought from a variety of suppliers worldwide (like Dabs in the UK) for around £80. Its smaller, lighter, runs for longer and seems to work just as well as the Psion. The 3Jtech Pegasus III is a worthy replacement to the ageing Psion standard in my view.