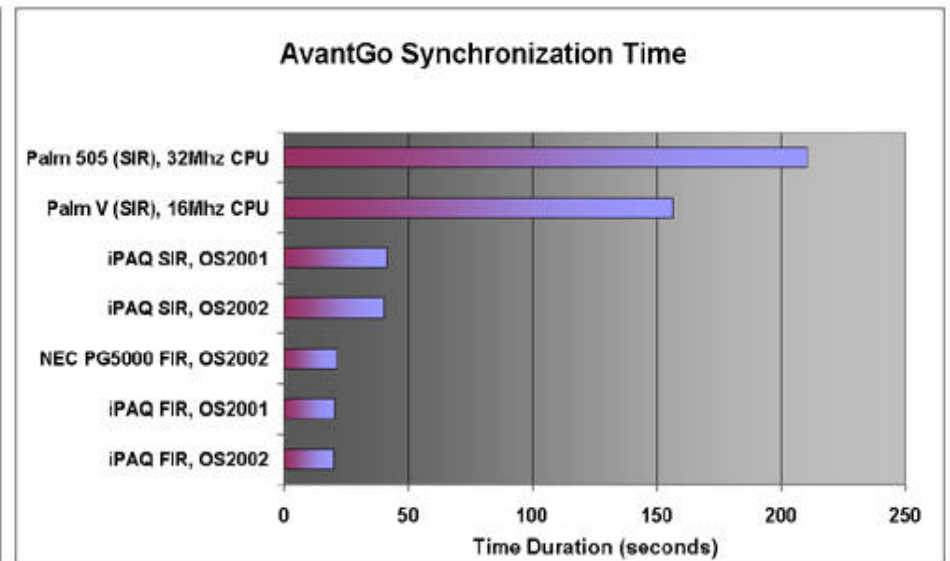
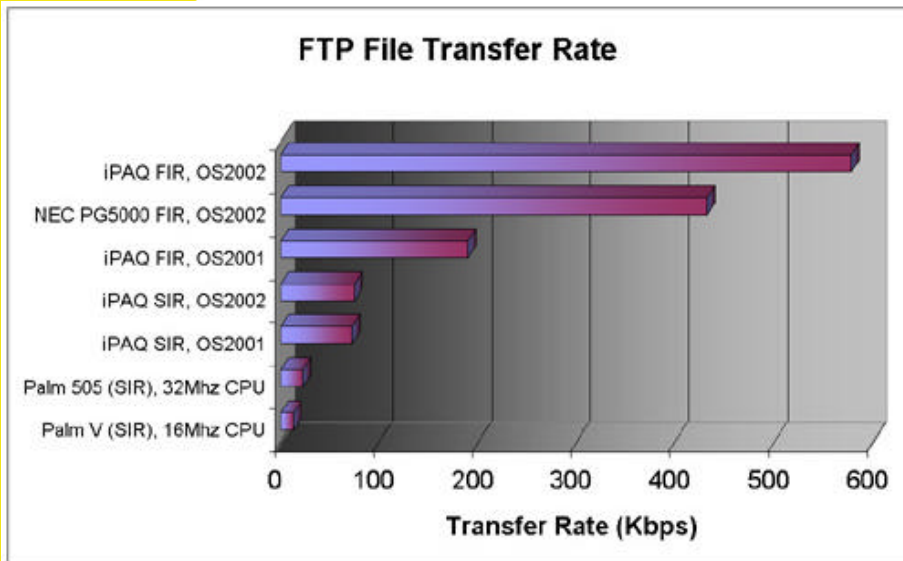


FIR (4Mbps) & SIR (115Kbps) performance on PDA



Performing 1MB file transfer thru EthIR LAN

- ASUS 620 (FIR): 10 seconds
- iPaq 3600/3700 w/ (FIR driver) : 14 seconds
- NEC PG5000 & P300 (FIR) : 19 seconds
- iPaq with built-in (SIR) : 112 seconds
- Palm Tungsten c (SIR): 4 minutes
- Palm V & 505 (SIR): 6 to 10 minutes

Performance of this test is limited by ADSL and the AvantGo web server for PPC running FIR.

Please check with PDA vendors for 4Mb FIR availability.

Note: performance measurement of ASUS 620 and Tungsten is conducted in 1Q2004 and others in 2Q2002

PDA recommendation – PDA supports 4Mb FIR

To receive the best infrared performance, the users should consider to buy PDA which supports 4Mb FIR although 115Kb SIR is suitable for data transfer at smaller file size.

For the same PDA model, FIR delivers ~15 times faster than SIR at application level. For example, to transfer a 700KB file, ASUS A620 PDA takes 6 seconds and it could take up to 90 seconds if it is forced to SIR purposely.

PDAs from different vendors deliver different performance over SIR at a range of ~2 times. CPU clock rate and the quality of the IR device driver are the main performance influencers. For example, to transfer a 700KB file, iPAQ 5550 takes 95 seconds but Palm Tungsten C takes 175 seconds.

If the PDA spec specifies IrDA, they normally mean 115Kb SIR unless “4Mb” or “FIR” or “IrDA v1.1” or “IrDA v1.3” is mentioned in the spec for FIR support.

As in 1/2004, 4Mb FIR is default in the NEC PG5000 & P300, Zayo A600 and ASUS PocketPC. HP iPAQ 3600/3700 has FIR capability but shipped without FIR driver. Clarinet has FIR driver applies to the iPAQ models 3600/3700 families.

Performance – FIR vs 802.11b on PocketPC

- **FIR delivers competitive throughput w/ 802.11b on PocketPC**
 - FIR : 570 Kbps on iPAQ 3700
: ~900 Kbps on ASUS 620 PPC
 - 802.11b : 667 Kbps on NEC PPC P300 (under clean environment)

