

File Size (MB)	Real Time (s)
1MB	0.506 s
10MB	2.215 s
20MB	3.070 s
50MB	6.932 s
100 MB	11.425 s

The plot shows that as the file size goes up, the transfer time also increases in a pretty linear way. That makes sense since bigger files naturally take longer to move, and the number of chunks you have to send grows with file size. Small files all look about the same because there's a fixed setup cost from starting the server and doing the control handshake, but once the files get larger, throughput becomes the main factor.

The main bottleneck is that each transfer has a fixed overhead from the round trips and IPC, and for bigger files the single-threaded read/write loop and FIFO throughput are what slow things down.