

Re: ethernet over a single pair of wires?

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- *From:* whit3rd <whit3rd@xxxxxxxx>
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On Feb 4, 7:54 pm, "mook Johnson" <m...@xxxxxxxx> wrote:

I'm looking at an application where there is only one available pair of wires through an interface. The wires are in a CAT-5 bundle but only 1 of the twisted pair is available. The length is only about 200 ft.

The desired connection is ethernet

The oldest, crufiest of tricks is a pair of baluns and a 10base2 (thinwire) media for your link. This will require a powered adapter box to serve a modern (10/100 or 10/100/1000 unshielded twisted pair) Ethernet jack. I'm not sure how the terminator current sensing was handled, there may have been some DC feedthrough added to the balun.

The modern way to do it on the cheap is to retask two pairs in the CAT-5 for Ethernet and put a hub in so your distant computer doesn't hog the connection. Then you have to replace one of the cable's functional pairs with an Ethernet service of some sort.

There are lots of DSL 'last-mile' solutions too, but those, and the Cisco and BlackBox solutions might be priced for industrial users.

There's only a 200 foot distance, eh? Have you considered WiFi with aimed antennas?

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