

Re: Serial+power over single coax cable

Source: <http://coding.derkeiler.com/Archive/General/comp.arch.embedded/2005-01/1642.html>

From: CBFalconer (*cbfalconer_at_yahoo.com*)

Date: 01/21/05

Date: Fri, 21 Jan 2005 22:48:11 GMT

"Paul E. Bennett" wrote:

> *CBFalconer wrote:*

>

>> *No, the first problem is to find out if the system has any chance
>> of working. To illustrate, lets assume the cable is RG58U, 100
>> meters long, with a station every 10 meters requiring 12V at 1 Amp,
>> adding up to 10 Amps total. Now I don't know that the ohms / meter
>> are for RG58U, but I seriously doubt that it can carry the net
>> current to deliver that power, and even if it does the ohmic drops
>> will be such that local regulators are needed, etc. etc.*

>

> *Considering that working up a SPICE model of multiple nodes does
> not take that long to do, this would answer such questions quite
> rapidly. It would also allow exploring a number of options of
> ideal supply voltage and current.*

To me this is ridiculous. All you need is ohms law and an old envelope to scratch out a preliminary feasibility study. If things are orders of magnitude out of whack, stop thinking about it. If there is are orders of magnitude of margin, go for it. If it is close, hire Paul Bennett to resolve it.

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"If you want to post a followup via groups.google.com, don't use the broken "Reply" link at the bottom of the article. Click on "show options" at the top of the article, then click on the "Reply" at the bottom of the article headers." - Keith Thompson