Use Low Capacitance Cable to Maximize your instruNet Network Speed

To maximize your instruNet network speed, it is recommended that you use low capacitance 25wire (DB25M/DB25F) cable, especially with long distances (e.g. >10meters).

If you are transmitting power over long distances, the following 24 Gage cable is recommended:

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Belden, Inc.
Cable Part #8112
Low Capacitance, RS-485/RS-232 Cable
Available in 100ft, 500ft, and 1000ft lengths
12.5 Pairs, with copper braided shield
24 Gage wire
41pF/meter between pairs
72pF/meter between a wire and the shield
78ohms/killometer wire resistance
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If you are NOT transmitting power over long distances, the following 28 Gage cable is a little less money, and is just as capable as the above 24 Gage model.

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Belden, Inc.
Cable Part #8142
Low Capacitance, RS-485/RS-232 Cable
Available in 100ft, 500ft, and 1000ft lengths
12.5 Pairs, with copper braided shield
28 Gage wire
36pF/meter between pairs
65pF/meter between a wire and the shield
213ohms/killometer wire resistance
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Regular cable (i.e. not "low capacitance") typically sports 3 times the capacitance as the above models, and will therefore cause the instruNet data transfer rates (e.g. maximum sample rate) to reduce by a factor of 3 or so.