



IEEE 802.3 Ethernet Working Group

March 15, 2007

From: IEEE 802.3 Ethernet Working Group

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Members ISO/IEC JTC 1/SC 25

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Title: Communication to ISO/IEC JTC 1/SC 25 regarding IEEE P802.3at Power via the MDI Enhancements

Subject: Response and Update to 3N821

Action: Information

Dear Colleagues:

Thank you for the update to the 9 questions and additional feedback that was presented by Mr. Flatman at our March Plenary. We look forward to continued updates on some of the ongoing items.

New Question 10: References temperature e.g. operating temperature, does this apply to the outside of the jacket or the inner conductor?

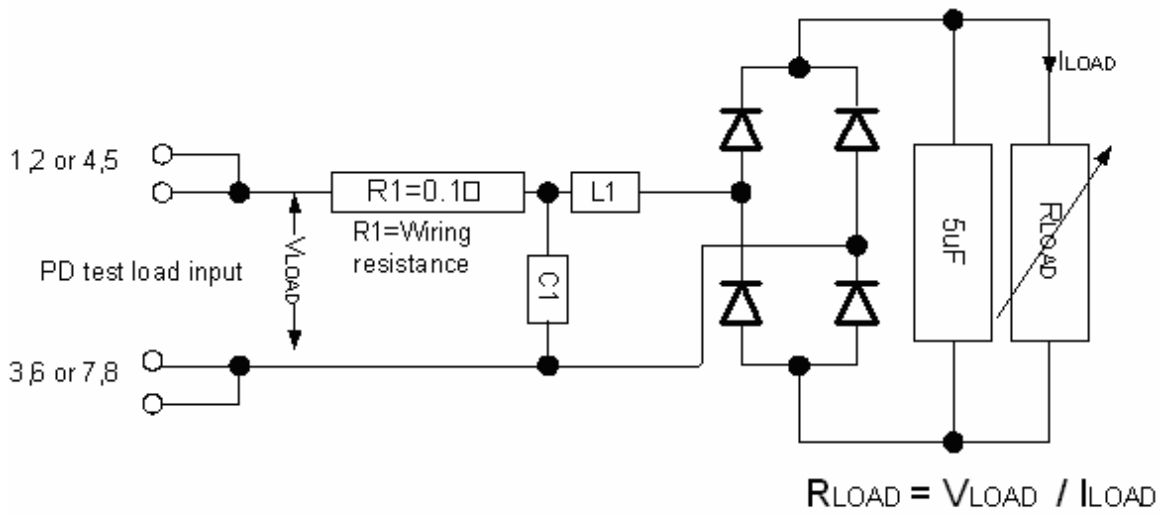
New Question 11: Can you please advise us of the test methods or qualification of cable for reliability to support PoE applications.

Update to Question 9: The PSE shall have negligible current between 300 msec to 400 msec after a disconnect event. The PSE shall completely remove any voltage by 500 msec. Please refer to Sections 33.2.8.10 and items 7a and 13a in Table 33-5 of 802.3-2005

Observation 1 Response: Can you please advise us of the test methods for qualification of connectors to support PoE applications.

Observation 3 Response: Please see the attached model (which has been approved in the IEEE P802.3at Task Force meeting on March 15, 2007) for the PD that you can use in your simulation. Please note that the model attached reflect the currently approved 802.3-2005 PoE devices. This model may be subject to change as IEEE moves forward but can serve as a starting point for your work.

Diode bridge as an example of polarity insensitive input as required by 802.3af



Notes: L1 and C1 forms possible EMI filter components in the PD.

L1max=100 uH, C1 (typical)=0.1 uF.

Rload is a variable load that is used to set the load currents in subclause 3.2 steps 2-5.

Notes 2: R1 is 0.1 ohm

Notes 3: This load is only representative during disconnect, there is no load during connect.

We appreciate your cooperation in our past work and look forward to receiving your answers and advice for this current project.

Regards,

Robert M. Grow
Chair, IEEE 802.3 Ethernet Working Group