

PD Isolation

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PLS and MAC

- Current 802.3 clauses require isolation specifically between Layers 1 and 2 of the seven layer stack
- UL, CSA and real safety engineers only care about isolation regarding users.
- 1500V isolation between the MAC and the MAU/MII/GMII inside a double insulated appliance (read phone or access point) is a waste.
- Wasted capacity is wasted money.

The Right Thing

- Open 10BASE-T, 100BASE-TX, and 1000BASE-T and add text to the effect “when implementing a Power Via the MDI PD (clause 33) 1500V isolation must be maintained between the powered MDI and all other user accessible conductors.”