

IEEE802.3at Task Force

PSE-PD Power Feeding

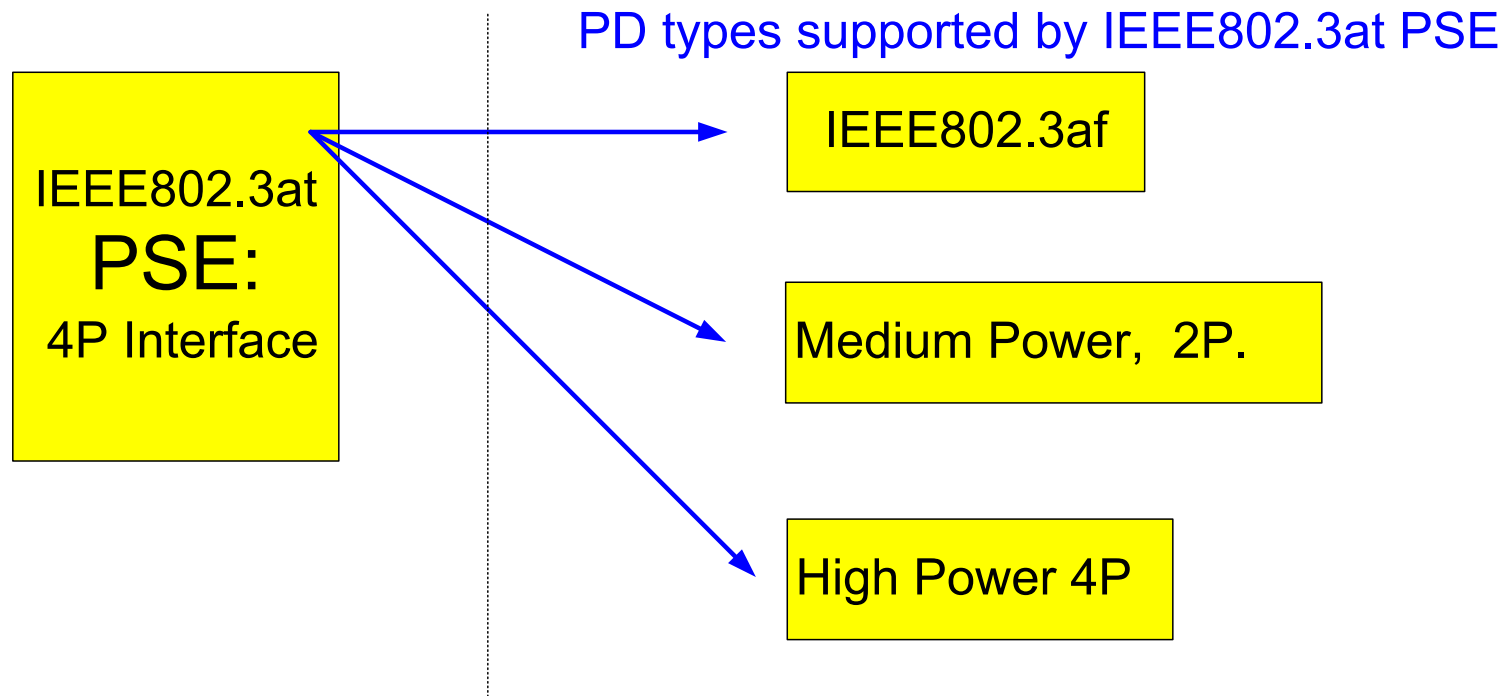
Summary of the IEEE802.3at group Consensus

Vancouver BC, November 2005

Yair Darshan/ PowerDsine



From September 2005 meeting



Note: Medium Power [W] may be $\sim 0.5 \times$ High Power [W]



Principles of the concept

- IEEE802.3at PSE:
 - 4P interface for any IEEE802.3at PD options

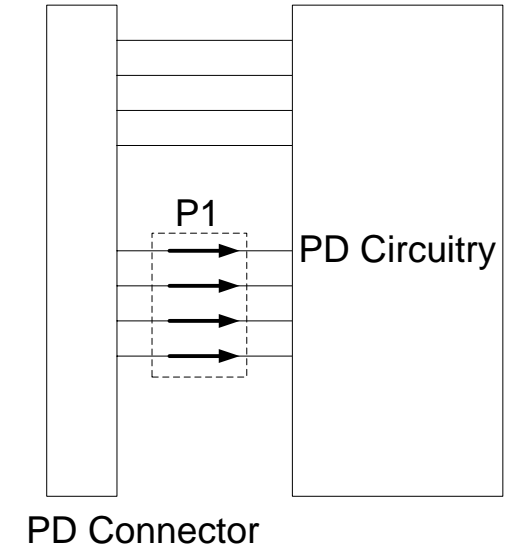
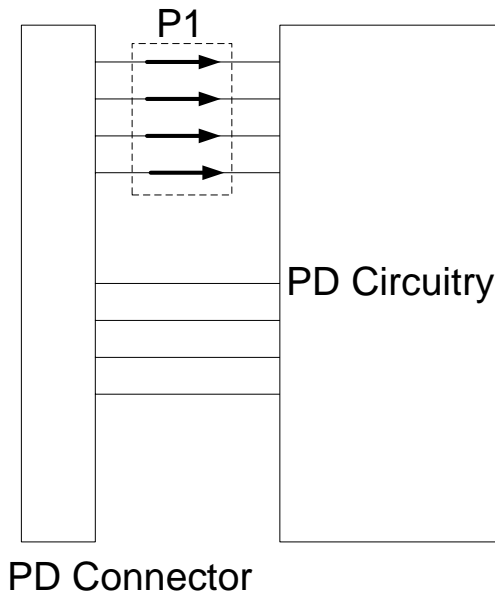
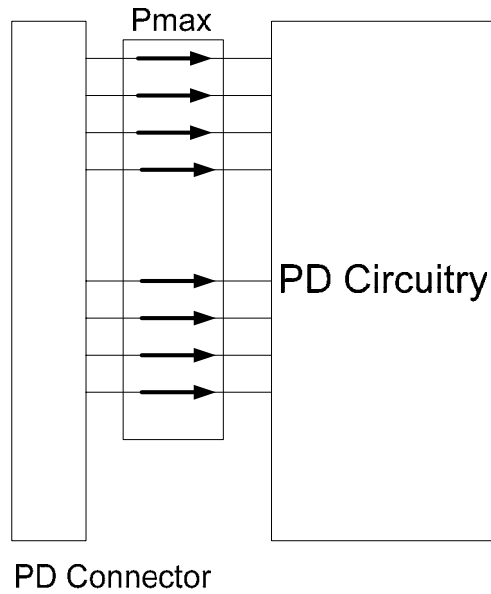
- PD:
 - PD options
 - HP through all 4 pairs
 - MP 2P, with either pair (like in 802.3af)
 - IEEE802.3af



Power Delivered to the PD

Pmax →	-PoE Plus power supply V,I range -4 pair only
P1 →	-PoE Plus power supply V,I range -2 pair (but either pair) only
12.95W →	-802.3af power supply range (44V min, 0.35A)
Min power →	-2 pair (but either pair) only

PD types



Summary

- IEEE802.3at PSE circuitry (4P interface) shall be capable to operate the following PD configurations:
 - IEEE802.3af PDs
 - IEEE802.3at 2 Pair Medium Power on either pair.
 - IEEE802.3at High Power over 4 pairs

- Proposal: PoEp PSE operating voltage should be discussed separately.

