**Power Matters** 



#### IEE802.3 4P Task Force Type 4 Power capability is Over 4P. 0.5\*Type 4 power is missing from the specification. January 2015 Rev 002a

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## **Objectives**

- To make sure that we can support PSEs with half of 90-100W power over 2P i.e. PSEs with half of Type 4 power over 2P.
  - No P2P lunb issues.
  - Can be supported with 802.3bt enhancements/features.
  - Cost effective PSEs over 4P cables (no need to use 4P 90W-95W PSEs to deliver 45 over the 2P)
- Background We support the following list in 802.3bt draft. 4a is missing

PSE Type	PSE power	# of pairs	PD power
1	15W	2P	12.95
2	30	2P	25.5
3	30	4P	25.5W(TBD)
3	2x30W=60W	4P	49-51W
Derivative of Type 3	Half of Type 3=30W ©	2P	25.5W
4	2x47.5W=95W (TBD)	4P	75W with CAT5e, Vpse=50V,12.5Ω Higher with CATxx, Vpse=50V,<12.5Ω
4a	Half of Type 4 (45W – 47W)	2P	Half of 4a use case

Having all the list above is a complete set of solutions.



#### Can we support half Type 4 power over 2P?

- Obviously Yes.
  - By definition if Type 4 power can be supported by 4P.
  - Half of it can be supported by 2P...

#### Advantages

- No P2P lunb issues.
- Can be supported with 802.3bt enhancements/features.
- Cost effective PSEs over 4P cables (no need to use 4P 90W-95W PSEs to deliver 45 over the 2P)



### Summary

 To make sure that (Type 4)/2 power will be supported by the specifications over 2P as well as done for all the other types and configurations.



# **Thank You**



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