P_{Port_PD} and average power v100

145.3.8.2 Input average power

P_{Port_PD} is the average power drawn by a single-signature PD, measured using a sliding window with a width of 1 second ~~, defined in Equation (145–23)~~. $P_{Port\_PD\text{-}2P}$ is the average power drawn by a given Mode of a dual-signature PD, measured using a sliding window with a width of 1 second~~, defined in Equation (145–24)~~. The average power, P_{Port_PD} and $P_{Port\_PD\text{-}2P}$, includes any peak power drawn per 145.3.8.4.

Delete Equation 145–23 and 145–24.

For single-signature PDs, ~~the average value of~~ P_{Port_PD} shall not exceed P_{Class_PD} for the assigned class. For ~~a~~ dual-signature PDs, ~~the average value of~~ $P_{Port\_PD\text{-}2P}$ shall not exceed $P_{Class\_PD\text{-}2P}$ for the assigned class.

The PD shall not draw more power than $P_{Autoclass\_PD}$, unless the PD successfully negotiates a higher power level, up to the PD requested Class, through Data Link Layer classification as defined in 145.5.

P_{Class_PD} and $P_{Class\_PD\text{-}2P}$ defined in Table 145–29 are determined per the assigned Class. The assigned PSE Class is determined by the number of class events and the PD requested Class, as shown in Table 145–11. P_{Class_PD} is the maximum average PI power and applies to single-signature PDs. $P_{Class\text{-}2P}$ is the maximum average power on a pairset and applies to dual-signature PDs.

~~The maximum average power, P_{Class_PD} or $P_{Class\_PD\text{-}2P}$ in Table 145–29 or PDMaxPowerValue in 145.5.3.3.1, or $P_{Autoclass\_PD}$ defined in 145.3.6.2, including any peak power drawn per 145.3.8.4, is averaged over a 1 second sliding window.~~ PDs may dynamically adjust their maximum required operating power below P_{Class_PD} or $P_{Class\_PD\text{-}2P}$ as described in 145.5. PDs may also adjust their maximum required operating power below P_{Class_PD} by using Autoclass (see 145.3.6.2).

Single-signature PDs that have successfully completed DLL classification shall not exceed a power consumption of PDMaxPowerValue as defined in 145.5.3.3.1. Dual-signature PDs that have successfully completed DLL classification shall not exceed a power consumption of PDMaxPowerValue_mode(X) on Mode X as defined in 145.5.3.4.2.