Baseline for AC and DC disconnect P802.3bt D1.1 v101

33.2.9.1 PSE Maintain Power Signature (MPS) requirements

The MPS consists of two components, an AC MPS component and a DC MPS component.

A Type 1 or Type 2 PSE shall monitor either the DC MPS component, the AC MPS component, or both. A Type 3 or Type 4 PSE shall only monitor the DC MPS component.

33.3.8 PD Maintain Power Signature

In order to maintain power, the PD shall provide a valid Maintain Power Signature (MPS) at the PI. The MPS shall consist of current draw equal to or above I_{port_MPS} for a minimum duration of T_{MPS_PD} measured at the PD PI followed by an optional MPS dropout for no longer than T_{MPDO_PD}. The values of I_{port_MPS} , T_{MPS_PD} and T_{MPDO_PD} are shown in Table 33-19a. A Type 1 or Type 2 PD, or a PD which does not detect a long first class event, shall in addition show the input impedance with resistive and capacitive components as defined in Table 33-19.

Types 3 and 4 PDs which detect a long first class event in the range of T_{LCF_PD} may reduce T_{MPS_PD} in order to draw a lower standby MPS power. In absence of a long first class event the minimum T_{MPS_PD} is higher, and the standby MPS power is also higher.

A Type 3 or Type 4 PD shall have T_{MPS_PD} measured with a series resistance representing the worst case cable resistance between the measurement point and the PD PI.

PDs using auto class shall use the I_{port_MPS} associated with the PD class advertised during physical layer classification.

~~The MPS for all PDs shall have input impedance with resistive and capacitive components defined in Table 33-19.~~