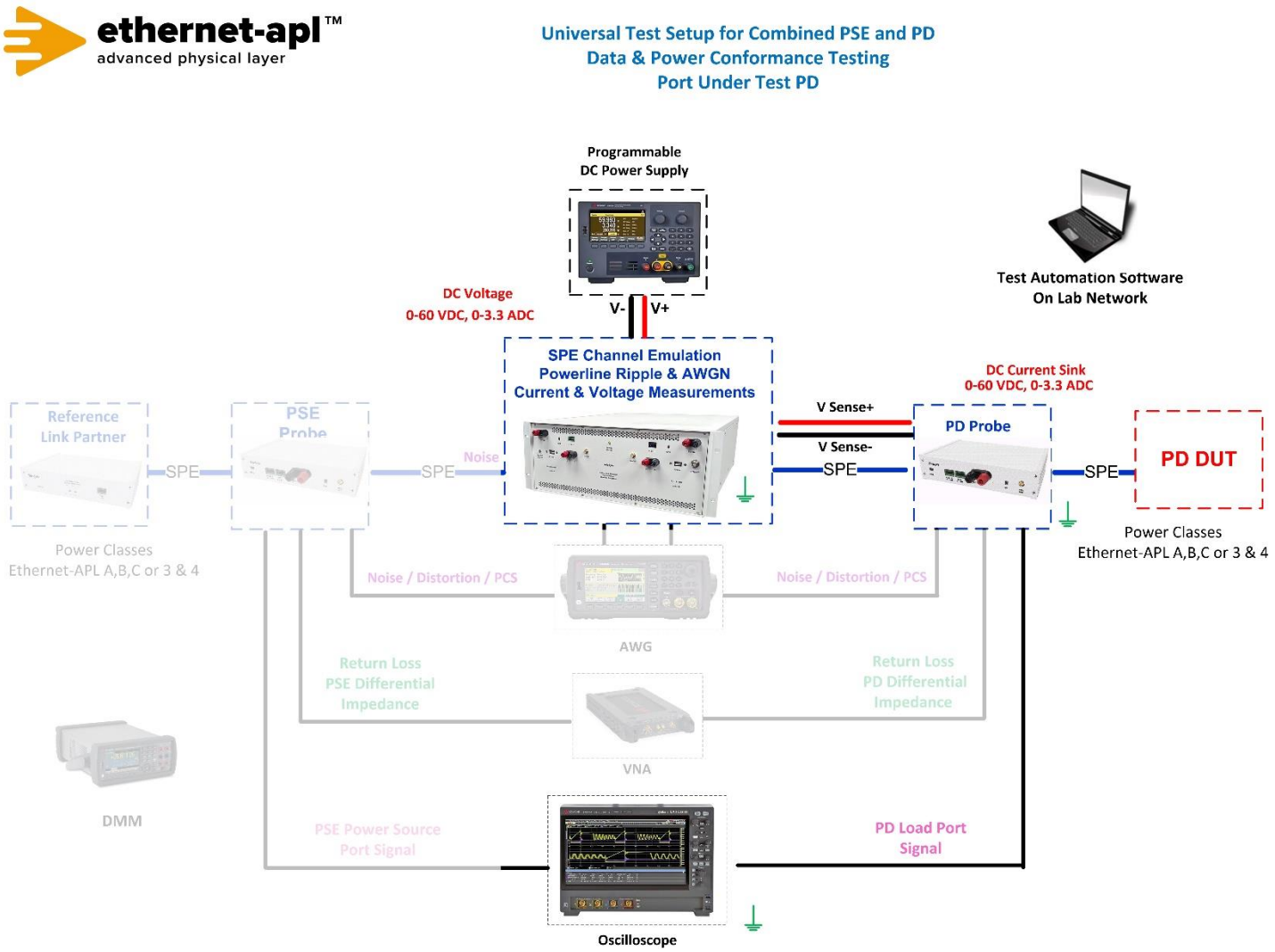
Test Type (Data or Power): Power
Test Name: TL.3.1 Terminal and Connectors

Purpose/Description: To verify that a Trunk Power Load uses a valid port connector and that the pins of the connector exhibit their assigned functions.

Required Test Equipment:

1. PSE Probe
2. DC Power Supply (To power the PSE Field Switch DUT)
3. Programmable DC Load
4. 4950 Channel Emulator
5. Oscilloscope
6. Test Automation Software

Test Setup / Connection Diagram:



Device Under Test Setup:

- Enter the Power Class for the Device Under Test (Class 3 or 4) into the test automation software.

Expected Results (Pass/Fail Criteria):

Step	Status	Description
2, 6	PASS	a. The observed connector is an M8 or M12 socket (A-Coded), or a terminal block connection; **and** b. b. An auto-negotiation signal is present between the APL signal+ and APL signal– pins 10BASE-T1L uses Low Speed Mode (LSM) DME clock edge to clock edge is 625kHz.
2	FAIL	The observed connector is not an M8 or M12 socket (A-Coded) or a terminal block connection
6	FAIL	An auto-negotiation signal is not present between the APL signal+ and APL signal– pins

Notes:

References:

[1] APL Port Profile Draft 1.2 Section A.1, A.3, A.4
[2] IEC 60603-7-3
[3] IEC 61076-2-101
[4] IEC 61076-2-104
[5] Methods Annex – Power Supply Voltage Sensing