

# Ethernet-APL Test Guide

**Test Type (Data or Power):** Power

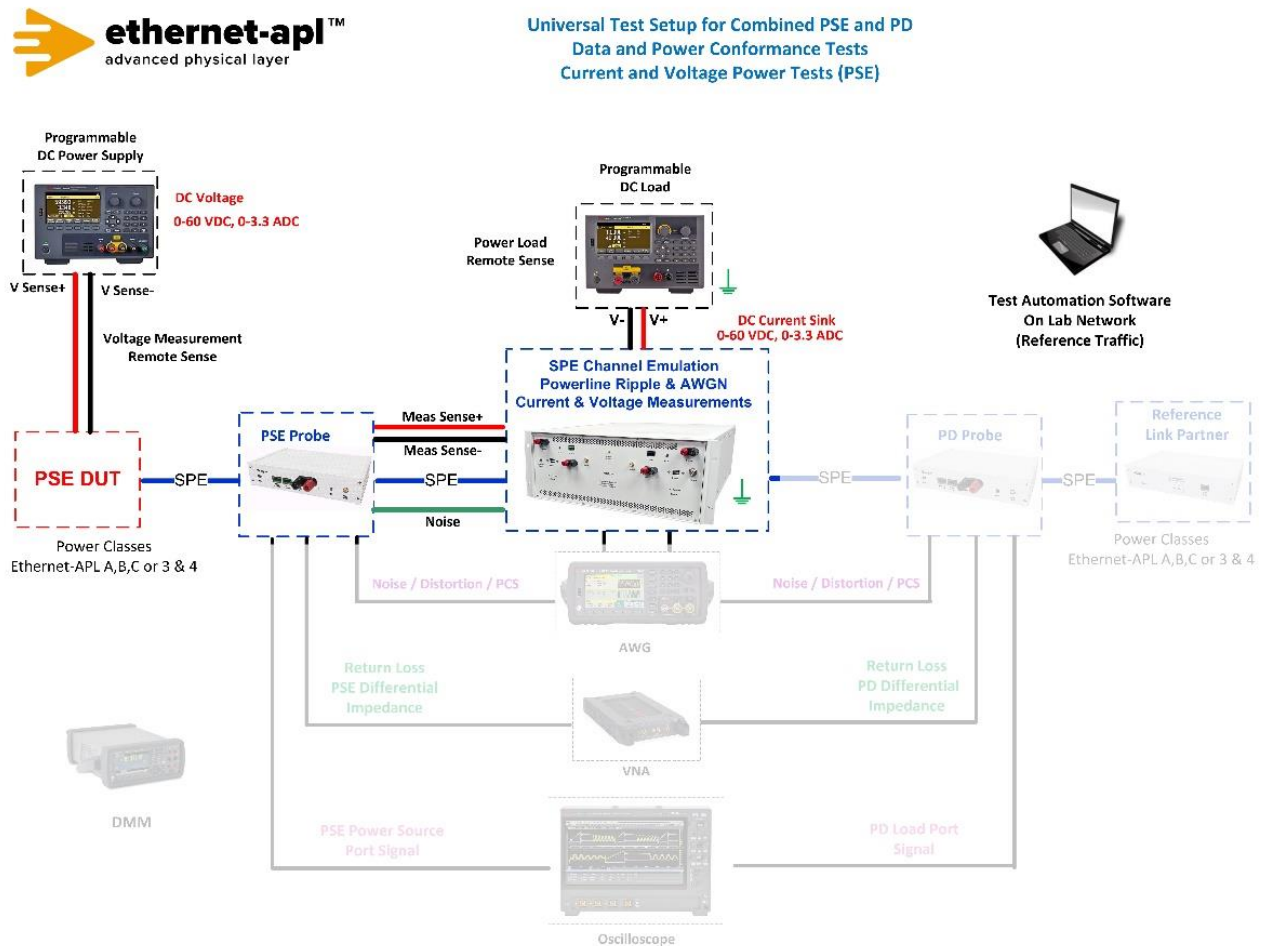
**Test Name:** SP.1.1 Powering Class Currents

**Purpose/Description:** To verify that a Spur Power Source port can source the minimum required level of current (20mA) to the port interface. Minimum and Maximum Supply Voltage.

## 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. Test Automation Software

## Test Setup / Connection Diagram:



# Ethernet-APL Test Guide

## Device Under Test Setup:

- It is expected that all tests are performed with PHY communication abilities disabled. This is achieved by disabling Auto-Negotiation and setting the PHY to SLAVE mode. Regardless of the PHY state, each data line of the port under test shall be terminated by the Telebyte Probe.
- Enter the Power Class for the Device Under Test (Class A,B or C) into the test automation software.

## Expected Results (Pass/Fail Criteria):

Status	Description
PASS	The recorded value of $I_{PS}$ is greater than or equal to $I_{PS}$ (MIN) for the port power class Class A=B=C = 20mA
FAIL	The recorded value of $I_{PS}$ is less than $I_{PS}$ (MIN) for the port power class

## Notes:

[1] APL Port Profile Draft 1.2 Section 5.4 575

[2] Ethernet-APL\_Power\_Test Specification\_v1.4

**This test is recommended for iterations over temperature and system-level loading**