

Example Test Laboratory

Power Supply Ripple and Noise Test

Technician: John Engineer

Test Date: 2026-01-02 19:15:39

Equipment: SDS2104X Plus

Equipment ID: SN12345678

Test Procedure: TEST-PS-001 Rev 2.1

Project: DC Power Supply Validation

Customer: Acme Electronics

Temperature: 23°C

Humidity: 45% RH

Location: Test Lab 3

Overall Result: **X FAIL**

Measurements: 8 total, 6 passed, 2 failed

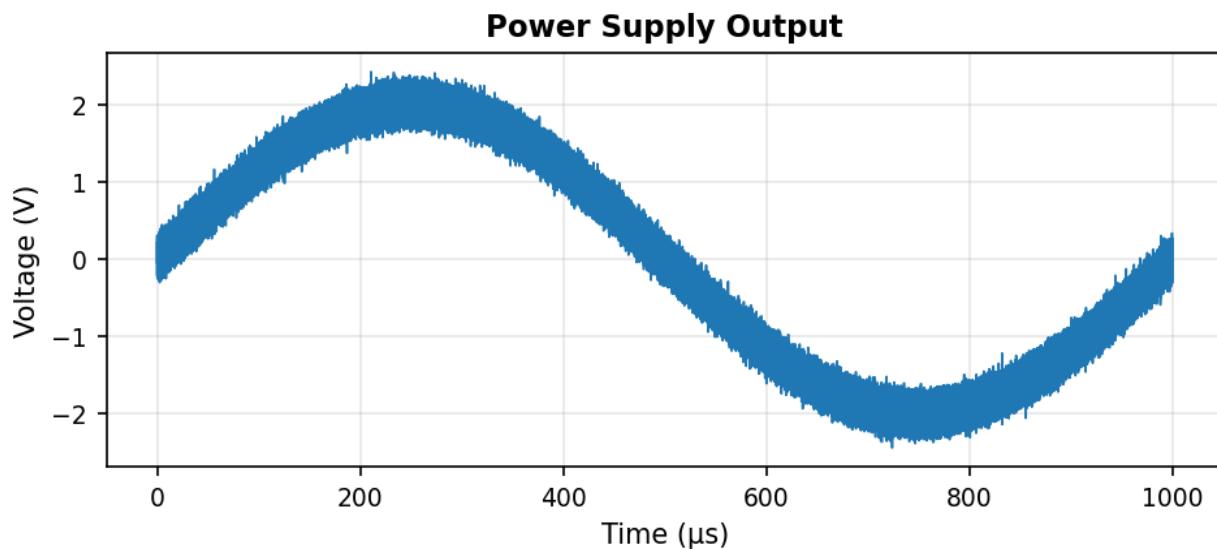
Test Setup

The device under test (DUT) was configured for 5V output with a 1A resistive load. Channel 1 of the oscilloscope was connected to the output using a 1:1 probe. The oscilloscope was set to 100 µs/div timebase with 1 V/div vertical scale.

Waveform Captures

Captured waveform showing the 1 kHz test signal output.

Waveforms



Channel: Power Supply Output
Sample Rate: 1000.00 MS/s
Timebase: 100.00 μ s/div
Record Length: 1000000 samples
Peak-to-Peak: 4.8598 V
Min: -2.4402 V
Max: 2.4195 V

Measurements

| Measurement | Value | Status | Criteria |
|--------------------|------------|--------|-----------------------|
| Frequency (CH1) | 1002 Hz | ✓ PASS | min: 990 max: 1010 |
| Peak-to-Peak (CH1) | 3.98 V | ✓ PASS | min: 3.8 max: 4.2 |
| RMS (CH1) | 1.42 V | ✓ PASS | min: 1.35 max: 1.5 |
| Rise Time (CH1) | 1.25e-07 s | ✗ FAIL | max: 1e-07 |

Measurement Results

Automated measurements with pass/fail criteria.

Measurements

| Measurement | Value | Status | Criteria |
|--------------------|------------|--------|-----------------------|
| Frequency (CH1) | 1002 Hz | ✓ PASS | min: 990 max: 1010 |
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| RMS (CH1) | 1.42 V | ✓ PASS | min: 1.35 max: 1.5 |
| Rise Time (CH1) | 1.25e-07 s | ✗ FAIL | max: 1e-07 |

Report generated on 2026-01-02 at 19:15:39 by Example Test Laboratory