



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
MATERIALS MANAGEMENT DIVISION
Powai, Mumbai - 400076

Technical Specifications

Up-gradation of Semiconductor Parameter Analyzer :

Keithley make repair/upgrade of 4200-SCS Semiconductor Parameter Analyzer

4200A Upgrade/repairs to Mainframe chassis with clarius software, 15.6 inch display, repair/upgrade to 4200A-SCS-PK2, 4X4200 SMU, 1X4200 PA, Triax-BNC

Adapters; Triax Cables set

Below parts list to be upgraded/Provided :

Item 1: 4200A-SCS KEITHLEY make Parameter Analyzer Mainframe: Nos 1

Item 2: 4200-SMU Medium Power Source-Measure Unit: Nos 6

Item 3: 4200-PA Remote Preamplifier Module: Nos 2

Item 4: 4210-CVU Capacitance Voltage Unit: Nos 1

Item 5: 7078-TRX-BNC 3-Slot Male Triax to BNC Adapter: Nos 8

Item 6: 7078-TRX-3 3 Slot Triax Cable: 3FT: Nos 30

Item 7: 8101-PIV Test Fixture

SCOPE OF WORK :

1. The old 4200-SCS parameter analyzer will be dismantled and shipped to TEKTRONIX-KEITHLEY service centre duly packed.
2. Old main frame will be upgraded to a new 9 slot main frame, XP windows operating system will be upgraded to windows 10 OS.
3. Old display will be replaced with new 15" high definition touch screen display and assembled in the 9-slot mainframe.
4. Keithly parameter analyzer software will be upgraded with new high speed CLARIUS software. This new software supports fast pulse measurement.
5. All the SMU's will be checked for operation and calibration suitability. SMU's will be fully modified to work with clarius software.
6. The old CV unit frequency enhanced to 10MHz and high voltage bias.
7. All cables and connectors will be checked for compatibility with the new hardware and replaced.
8. The upgraded main frame will accommodate the new fast pulse measurement modules.
9. The system will be fully calibrated and checked for performance at TEKTRONIX-KEITHLEY service centre.
10. The new repaired system will be installed and commissioned at IIT
- 11. Warranty for the upgraded system will be three years.**