Electron
Test Equipment

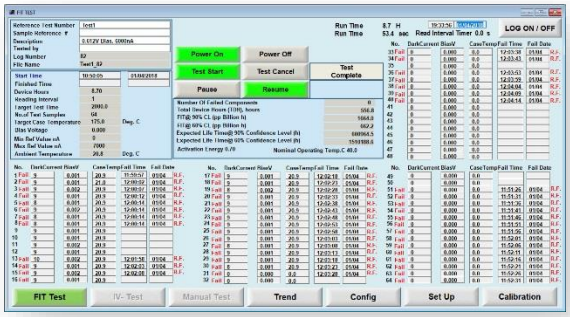
## Product Reliability Tester (PRT-LASER-HP-5)

# Laser Diode Reliability & Burn-In Test System

The custom Product Reliability Tester (PRT) is an Automated Test Equipment (ATE) system that provides a low cost, high performance, accelerated aging, burn-in, and qualification testing for laser diodes. The PRT uses precise control allowing the user to test up to 1024 laser diodes with various environmental chambers.

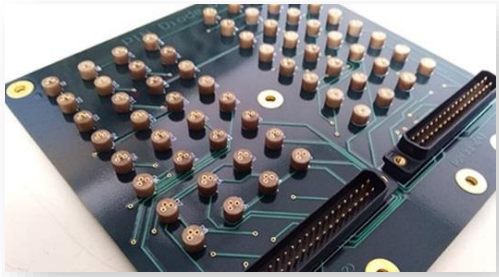
## Affordable & High Performance

### Powerful Software Interface



- An easy to use GUI provides real-time testing and functional reports
- Multiple test scenarios (recipes) are easily configured without complicated programming.
- FIT (Failure in Time) & Mean Time to Failure (MTTF) calculation
- LIV Curve, Threshold Current, Operating Current, Forward Voltage, Monitoring Current and Data Collection
- Designed for use by Operators & Supervisors
- E-mail notification

### Custom Interface Design



- Custom laser diode test fixture boards are built to meet your packaging & test specification
- Custom PRT system input and output interface board connections
- Custom interface control with third party environmental chambers
- Designed to operate up to 200°C

## Technical Data

| | |
|---|---|
| **Reliability Test** | FIT (Failure In Time), MTTF (Mean Time to Failure) |
| **Measured Quantities** | LIV Curve, Threshold Current, Operating Current, Forward Voltage, Monitoring Current, Vmax, Imax, Imin |
| **Number Test Components** | 64 - 1024 |
| **Current Range** | 1mA – 5,000 mA |
| **Current Accuracy** | 0.1% of Full Scale |
| **Source Measure Board** | Custom Interface Test Fixture |
| **Current Sweep** | 0.1 mA to 200 mA (200 steps) |
| **Maximum Current** | 5,000 mA |
| **Default Current Measurement Resolution** | Analog to Digital 13-bit |
| **Scan Time** | 2 to 6 seconds per component |
| **Input Voltage** | 110V -240V AC |
| **Power Consumption** | 220 Watts |
| **System Dimensions (mm)** | L-515 x W-477 x H-395 (size based on 64 component testing) |
| **Material** | Aluminum/Steel |

## Essential Features

**Conforms to Test Standards**
Telcordia (Bellcore) GR-468-CORE
MIL-STD-883E, Test Method 1016

**Types of Testing**
Accelerated aging, burn-in, and qualification testing

**Designed to Work with All Third-Party Environmental Test Chambers**
HAST, HTOL, Autoclave, Temperature & Humidity, Bias Test

**Power Monitoring & UPS Backup**
Power Failure mode ensures data integrity even through power blackouts

**Laser Diode Protection**
Custom current high/low limits are set to protect the laser from damage during burn-in or reliability testing

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