



# Accelerated Ageing

## Low power laser diode burn-in

# Y1000

### ABOUT THE SYSTEM

Easily test the reliability of low power laser devices with Yelo's Y1000 Standard accelerated ageing system. It will quickly identify defective devices so you can prevent them reaching your customers. The Y1000 software automates threshold calculations and has an expandable capacity which helps work through tests more productively.

The Y1000 is ideal for testing in a production environment. It is capable of providing probed accelerated ageing for QFSE, SPF+ and 400G and 800G networks. Individual laser components can be tested with LIV measurements being performed in-situ during burn-in cycles

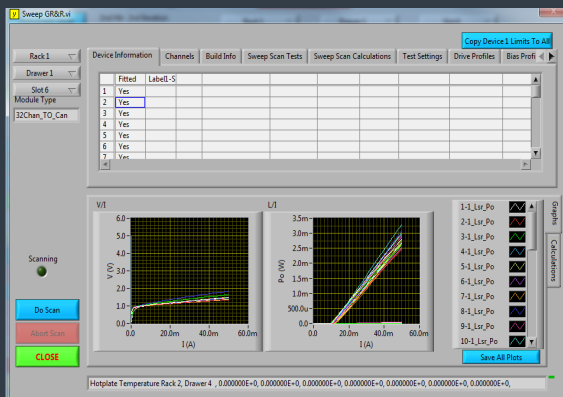
### PROTECT YOUR LASER

The Yelo Y1000 product has a number of key features to protect your laser.

- Programmable current ramp on and off to reduce thermal shock
- Over current protection
- Over and under temperature protection
- Controlled shut-down on power failure

### BURN-IN SOFTWARE

The screen-shot is an example of Yelo's capability showing graphical output from post burn-in functional tests that were performed on 32 TOcan lasers.



LEFT GRAPH: The voltage drop across the lasers changes as more current is driven into the laser.

One laser is showing an open circuit failure (blue line), displayed as a straight 5 Volt measurement.

RIGHT GRAPH: The graph on the right shows an LIV curve, where the devices have begun to lase at approximately 10mA. Threshold calculations are automated by the system software.



### OPERATOR SAFETY

Yelo manufacture systems with the operator at the forefront of the design. The low power laser diode systems feature:

- Interlock to stop accidental start of tests
- Operator health and safety
- CE Compliant

### DEVICES

- ✓ Laser Diodes
- ✓ Avalanche Photodiodes
- ✓ Integrated Devices
- ✓ Photodiodes



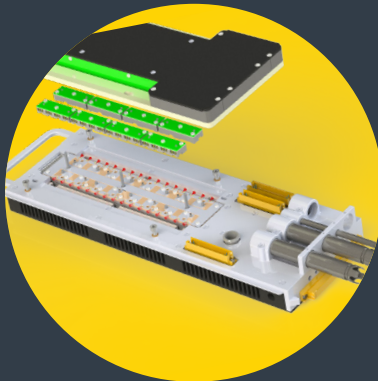
# Y1000

## System Features & Architecture

### SYSTEM FEATURES

- Test T0can, COS, COC, BFLY, VCSEL's, Photonic Integrated Devices and much more
- Capable of burn-in for QSFP, SFP+ and 400G and 800G networks
- Modules are independent
- All measurements are instrumentation
- Channel density up to 2,048 devices
- Ideal for testing low power devices up to 1000mA
- Used for accelerated ageing & vendor qualification
- Custom built to your specification with NIST standard instruments
- Air cooled

### ARCHITECTURE



Modules



Drawers



Racks

### SPECIFICATION

Rack style	42U
Rack size	800mm (W) x 900mm (D) x 2100mm (H)* <small>*exclusive of traffic light</small>
Temperature Range	25 - 150°C
Temperature Control	PID (accuracy +/- 1°C) Multiple temperature control for each module
Maximum Current per Device	Up to 1000mA
Capacity	Up to 2,048 devices