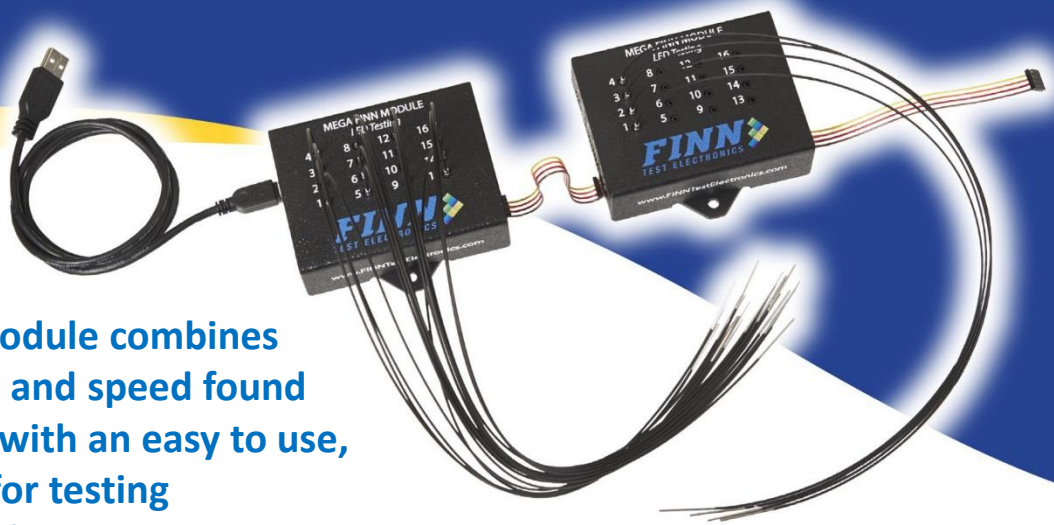
MEGA FINN™ MODULE

Unparalleled speed
and accuracy



The Mega FINN Module combines all of the accuracy and speed found in the Mega FINN with an easy to use, compact module for testing larger quantities of LEDs.

APPLICATIONS

- When test requirements call for the absolute fastest test time possible.
- When quality control demands reliable, unerring accuracy and when clear cut measurements are vital.
- For pulsing, bright to very dim LEDs – visible light from Ultraviolet to near infrared.
- Functional and In-circuit test environments, on any test platform.
- For use in testing multiple LEDs and excellent for large quantities of LEDS.
- Ideal for Functional test set ups and MDA stations where frequency and/or voltage measurements are not possible..

FEATURES

- High accuracy of +/- 0.3% and average resolution of 0.1nm across the visible spectrum.
- Fast response time – typically less than milliseconds for average to bright LEDs.
- Eliminates the need for additional measuring hardware for Frequency or Voltage readings.
- Quick and easy installation with the flexibility of either a USB or Serial connection with built-in overvoltage protection.
- Fiber Optics are 1.28 mm in diameter, allowing for testing of very closely spaced LEDs.
- Compact module is easily mounted in an ICT fixture or Functional test station.

ORDERING INFORMATION

DESCRIPTION	PART #
4 LED Mega FINN™ Module *(Tests up to 4 LEDs)*	TCMega_4Mod
8 LED Mega FINN™ Module *(Tests up to 8 LEDs)*	CMega_8Mod
12 LED Mega FINN™ Module *(Tests up to 12 LEDs)*	TCMega_12Mod
16 LED Mega FINN™ Module *(Tests up to 16 LEDs)*	TCMega_16Mod

OPTICS

DESCRIPTION	PART #
18" Fiber optic cable assembly	TC18_FO
24" Fiber optic cable assembly	TC24_FO

MEGA FINN™ MODULE

PRINCIPLE OF OPERATION

The Mega FINN™ Module utilizes the technology and advanced LED color and intensity measurement capabilities of the Mega FINN™ sensor packaged in an enclosed housing to allow simultaneous testing of multiple LEDs, without having to power up each component individually. This cost effective method of determining the presence, color and/or brightness of LEDs, will enable users to test large quantities while minimizing fixture considerations and lowering per unit cost expense.

The module houses a custom assembly, including multicolor sensors and a microprocessor. Separate optical cables that are comprised of a press fit plug connect to numbered ports on the module and a metal shrouded tip on the opposite end which is placed in front or on top of the LED to be tested. When a command for a specific numbered cable is sent to the module, the module will measure the color and/or intensity of the requested cable and send back the measurement via the chosen interface.
Readings may be provided in either frequency (Hz) or in voltage (V) for the LED color and in voltage (V) readings for the LED intensity.
The modules may be ordered based on customer requirements, for testing LEDs in quantities of 4, 8, 12 and 16. In addition, modules may be daisy chained together to test greater numbers of LEDs as needed, up to a maximum of 254 LEDs.

The module(s) may be implemented into functional, in-circuit or stand alone systems, using either a USB or serial interface.

SET-UP

USB – plug in cable and align fiber optic in front of LEDs. Module utilizes the 5 volts provided by the USB itself, no external power supply is needed. The USB virtual COM port driver causes the USB device to appear as an additional COM port available to the PC.

Serial – power, ground, transmit (Tx) and receive (Rx) wires are wire-wrapped to PC or test fixture connection and fiber optics aligned in front of LEDs. 5v to 16v power supply is required.

Optics - the Mega FINN Module has two fiber optic options available – an 18" cable assembly and a 24" cable assembly. The press fit plug end of the cable assembly fits into the number labeled socket in the top of the module body. The metal shrouded end of the cable assembly is placed in front of or over the LED being tested. It may be held in place by a drilled 50 mil hole in the top plate or a drilled block of a fixture so that the opening is centered over the face of LED.

DIMENSIONS