

Calibration + electrical test + optical test + mechanical test.
All in one machine.

T100

FLYING ACTUATOR OPTOMECHATRONICS TESTER

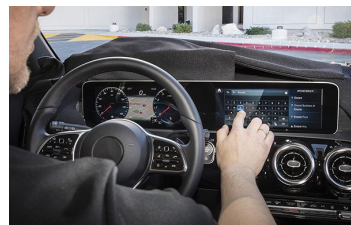
UNIQUE-IN-THE-WORLD SYSTEM TO TEST OPTO, MEMS, SENSOR,
MICROELECTRONICS, MICROMECHANICS TECHNOLOGIES



AMONG THE MAIN APPLICATION FIELDS:



Home appliance



Automotive



Consumer



Industry

innovative multi-function tester for device calibration, electrical test, optical and mechanical inspection

fully integrated and synchronized electrical, optical and mechanical stimulus

reconfigurable and usable for different products

reliable, repeatable, consistent test results

OVERVIEW

T100 is a flying actuator tester designed to calibrate and test any kind of device, product or module with latest microoptics, MEMS, sensor, microelectronics, micromechanics technologies. **T100** can be equipped with all the tools to perform calibration, parametric and functional electrical tests, mechanical test, optical inspection. All on a single machine, with no need for additional equipment. It is the ideal tester for production lines with a wide variety of products and frequent entry of new ones.

The tester is fully configurable. **Up to 4 flying heads on the top side** of the test area, and **4 flying heads on the bottom side**, can mount various **actuators**, such as:

- **Force actuator tools** used to test, calibrate and measure any force-sensible device (keyboards, push buttons, 3D displays, flexible devices)
- **Z-Actuators** used to move, on Z axis, optical and electrical tools
- **Laser Meter** used to test, calibrate and measure mechanical dimensions, deformation and planarity
- **Light meter** used to test, calibrate and measure any light source such as LEDs, LIDAR systems, displays
- **Light source** used to test, calibrate and measure any light sensor or LIDAR sensor
- **Cameras** used to verify presence, orientation, shape of components, hole dimension, scratches or dust on the product surface
- **Sound Meter** used to test, calibrate and measure sound-emitting devices (buzzers, speakers)
- **Motorized screwdriver** used to assembly, screw and calibrate mechanical or electro-mechanical devices

The tester can be configured with **In-line Conveyors** for the automatic loading of the units under test, which can be identified with fixed tools such as **RFID and 2D Readers**. The bottom test area can accommodate a **Movable Bottom Plate Support** that can host additional fixed test tools.

The **T100 operating software ATOS** includes all the features for test execution, test program development and automatic test generation, as well as the tools for data management and analytics.

Main Applications

LIDAR systems	Touch screens	Keyboards
Displays	Electronic boards/modules/products	Communication ports
Adaptive lighting	LEDs	RF devices
Wearables	Push buttons	Sound devices

Test Types



ELECTRICAL

- Parametric test
- Power test
- Functional test
- Waveform capture
- RF test
- 5G test
- Flashing



DIMENSIONAL

- Homogeneity test
- Position test
- Dimension test
- 3D scan test (shape and profile)



MECHANICAL

- Force test
- Press test
- Travel test
- Swipe test



OPTICAL

- Measurements
- AOI
- Light test
- Laser test
- Character test
- Hole test
- Surface test
- Solder paste test



THERMAL

- Temperature mapping
- Temperature conditioning



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