# TSIM

## Test System Intelligent Machine for Functional Testing

Highly flexible and modular (from PCB level to complete assembled device on the same base machine)

High reliability and cost-efficient measurements

User-centered eco-design to meet high ergonomic standards

Remote assistance using augmented reality goggles or tablet

Auto diagnosis and validation of the system to ensure proper functionality and test repeatability



## Product Description

TSIM - Test System Intelligent Machine was developed by Controlar to perform different levels of functional tests on electronic devices and components at the end of the production line (EoL) to ensure correct functionality of the DUTs. This complete solution is prepared for flexible and dynamic production, using a standard interface and a quick ChangeOver method. The rapid exchange is key to reducing operating times, and thereby improving flow and machine availability.

## KEY FEATURES

Zero Force Quick ChangeOver (ZFQCO) concept

Suitable to test all key technologies for electronics systems

Fast and accurate identification of error sources

Future-proof and adaptable to DUT needs with easy upgrade of functionalities

Remote assistance using augmented reality goggles or tablet

Auto diagnosis and validation of the system to ensure proper functionality and test repeatability

## PRODUCT CONFIGURATION

TSIM uses a standard interface that allows it to be used for different types of testing concepts. This test solution can be customized with different modules, such as:

**1/** PCB level – semi automatic and manual

**2/** Complete device: semi-automatic and semi-automatic RF shield box

And instrumentation, such as:

**1/** Bus Interfaces: CAN, LIN®, LVDS, BroadR-Reach™, MOST150

**2/** Multimeter, programmable power supply, RF generator and/or analyzer, etc.

## MAIN APPLICATIONS

TSIM was developed to meet the high standards of the automotive industry, which makes it also ideal for other industries, such as consumer and industrial electronics, with the possibility of being customized for different types of products.

# TECH SPECS

**Dimensions (in mm)**
810 (W) x1150 (L) x2100 (H)mm

**Communication protocol**
**/** BroadR-Reach™
**/** CAN-FD
**/** CAN-XL
**/** FlexRay®
**/** LIN® bus

**Power supply**
**/** Voltage: 230VAC
**/** Frequency: 50Hz
**/** Current: 20A

**Measurements**
DC/AC voltage, current consumption, frequency, power factor, power level, resistance, capacity, temperature, audio and RF characteristics (S/N ratio, THD & SINAD, etc.).

**Auto diagnosis function (new feature) ***
DUT emulator for machine conformance validation

**Technical support**
Ready for remote assistance with augmented reality.

* under development

**Controlar**
innovating industry

+351 225 898 410
info@pt.controlar.com
www.controlar.com
–

**Controlar S.A.**
Rua do Caulino, 314
4445-259 Alfena
Portugal

**Controlar**
test systems

**Controlar**
automation systems

**Controlar**
solutions & partners

**Controlar**
aerospace & defense

**01** PORTUGAL | **02** SPAIN | **03** GERMANY | **04** MEXICO | **05** MALAYSIA | **06** INDIA