

# ITC-3100 DUC-3110 INJECTOR TESTER AND CLEANER



TBI (Single Injector Systems)

MPFI (MultiPoint Injector Systems)

FSI-GDI (Direct Injection Systems)

CNG-LPG (Natural & Liquefied Petr. Gas Syst.)



## ITC-3100

Test unit for diagnostic, **static and dynamic, injector checking**, for petrol engines. It comes with the Standard Injector Rail, which covers 90% of the cars.

## DUC-3110

Ultrasonic injector **cleaning unit**.

### Test Phase

The injectors under test are mounted onto the **ITC-3100** by means of the Standard Injector Rail. This device was specifically designed to fit most of existing Top Feed unit.

Clear and simple messages on the ITC-3100's display guide the operator through the **3 available Test Modes:**

**DIAGNOSTIC:** predefined sequence of functional tests which allows for a complete check of the status of injectors.

**MANUAL:** the operator can individually select each test phase, and set the control parameters.

**CUSTOM:** it is possible to define and store up to 5 custom test sets.

The flow tubes are individually calibrated for maximum accuracy. The integrated, high efficiency, white leds bar allows for continuous spray pattern check.

### ITC-3100's Special Functions

**AUTOTUNE:** it allows to trim the test parameters so that maximum resolution is obtained, thus optimizing test results and preventing the flow tubes from being overfilled during the flow test.

**INJECTOR AUTODETECTION:** the ITC-3100 automatically detects the type of injectors (saturated, peak & hold, etc.)

**ASSISTED TEST FLUID SERVICE:** the procedure to empty and fill **ITC-3100** from/with the test fluids is completely guided by a specific function.

### Cleaning Phase

**DUC-3110** allows for high efficiency cleaning of injectors, thanks to its high frequency generator unit and the cleaning fluid adjustable heating control system. During this cycle, the injectors are driven by the **ITC-3100**, with a sequence specifically designed to further improve the cleaning efficiency. Test and cleaning fluids are designed and developed in order to allow for maximum compatibility with rubber, plastic, and metal parts of the injectors.

## ITC-3100 & DUC-3110 Plus Features

- Innovative design and compact structure.
- Separated ultrasound unit - allows for cleaning of injectors as well as other mechanical parts.
- Software program to determine the nominal injector's flow rate, to get maximum resolution and to trim the test parameters based on the actual functional characteristics of the injectors.
- Integrated diagnostic and testing software, which guides the operator through all phases of the analysis of injectors' behaviour.
- Integrated, high efficiency, white LED bar pattern for checking of the injector's spray pattern.
- Automatic detection of injector type and self-adjusted injectors' drive.
- Nearly complete coverage of current petrol car market (equipped with EFI - in Europe starting with EURO I)
- Testing and cleaning fluids specifically developed for petrol and gas injectors and compatible with rubber and plastic parts of the injectors.
- Software update possible with a link to a PC.
- CE marked product.

## Technical Features

Injectors Tester and Cleaner for petrol engines, for TB1 (Monopoint) - MPFI (Multipoint) - FSI/GDI (Gasoline Direct Injection) - LPG/CNG (Gas injection)

### **ITC-3100 Test Unit:**

Automatic Injector Type Detection

Operator Interface with membrane keyboard and alphanumeric 20x4 LCD

Hydraulic circuit pressure adjustable from 0 to 6 bar

Assisted hydraulic circuit emptying and filling procedure

Power supply: 85264VAC / 47-63Hz

Power Consumption: 200W

Weight: 18 Kg

Dimensions: 370x500x500 mm (WxHxL)



### **DUC-3110 Cleaning Unit:**

Ultrasound frequency: 40 kHz

Ultrasound power: 50W

Cleaning bath capacity: 2 L, heated (temperature adjustable up to 70°C)

0-30 min Timer

Power supply 230Vac - 50Hz

Weight 2.5 Kg

Dimensions: 175x220x165 mm (WxHxL)



## Standard Sale Configuration

> **ITC-3100.** Test Unit

> **DUC-3110.** Cleaning Unit

Top Feed injectors Standard Rail, complete with adapters

Test fluid 1 L.

Cleaning fluid 1 L.

### **Optionals:**

EVO Rail for Top and Side Feed injectors

CNG/LPG adapters

Test and cleaning fluids