

# Sparkdiagnostic

## HT-MSIA505

### Quick and easy diagnostics of :

- Misfire detection
- Start Failure
- Defective coils
- Faulty or damaged spark plugs
- Faulty spark plug wires

### No adapters, cables or scope required:

- Display waveforms in real time
- Detect and display dwell angle (in high voltage sparkplug-wire systems), and ramp time (for COP systems)
- Graph burn time, spark plug voltage, dwell/ramp time, and RPM for each spark, allowing for detection of misfiresEngine RPM
- Maximum and minimum readings



## HT-MSIA505 Sparkdiagnostic with 3.5" Color Display

The **HT-MSIA505** Engine Ignition Analyzer is a handheld instrument designed from the ground up for the diagnosis and performance measurement of all types of spark ignition systems, from conventional to the newest Coil on Plug in use.

Capable of displaying and measuring the following in real time: secondary ignition waveform, primary coil current ramp time, dwell time, spark burn time and RPM. It also provides two innovative and unique display formats used to compare measurements between cylinders, and to look at data for hundreds of spark events over time in order to detect intermittent problems, misfires and other performance issues which are very difficult to detect using conventional scopes.

This hand held device is powered by a rechargeable lithium battery, which provides up to 8 hours of battery life and uses a fast response 3.5" color TFT display with a bright backlight and wide viewing angle.

### Simple and easy to use

- Select the ignition system to be measured (spark wire or coil on plug), and the number of cycles.
- Place the capacitive pick-up (yellow tip) on top of the spark plug wire or ignition module.
- Read spark burn (firing) time, spark peak voltage and engine RPM on the LCD display.

### Special COP and SPW mode

- New and unique technology for testing coil on plug and coil near plug systems produces more consistent and reliable results.
- For the SPW mode the pick up sensor can directly touch the spark plug wire to read out data

## Technical Specifications

### Display:

- Display: Color 3.5" TFT (320x240 pixels)
- Measuring units indicator
- Measuring function indicator
- Spark detection indicator
- Maximum and minimum readings
- Low battery indicator

### Applications:

- Automotive
- Industrial
- Aviation
- Agricultural
- Marine

### RPM measurement:

- Range: 200 to 19,999 RPM
- Resolution: 1 RPM
- Accuracy:  $\pm 0.5\% + 1$  LSD

### Spark burn (firing) time:

- Range: 0 to 10.0 mS
- Resolution: 0.1 mS
- Accuracy:  $\pm 0.1$  mS + 1 LSD

### Spark (peak) kV:

- Range: 0 to 50 kV
- Resolution: 0.1 kV

- Repetitivity:  $\pm 0.2$  kV

### Response time:

- <300 mS (above 200 RPM)

### Flexible probe:

- (30 cm) long with capacitive pick-up

### Power Source and Battery life

- 9-volt ca. 20 hours

### Power Saving:

- Automatic power off after 3 minutes of inactivity

### Dimensions:

- 165 mm x 124 mm x 36 mm (without probe)

### Weight:

- 420 g

## MSIA 505 contains:

- **MSIA 505**
- **Protective rubber holster**
- **Hard carrying/storage case**
- **9 Volt alkaline battery**
- **User Manual**
- **2 Year Warranty**

### Local Distributor / Partner:



HUEGLI TECH AG (LTD)  
Murgenthalstrasse 30  
4900 Langenthal Switzerland  
Phone: +41 62 916 50 30  
Fax: +41 62 916 50 35

e-mail: [sales@huegli-tech.com](mailto:sales@huegli-tech.com)  
[www.huegli-tech.com](http://www.huegli-tech.com)