

# GTC505

## Engine Ignition Analyzer

### Quick, powerful and easy to use

- ▶ Plug the appropriate sensor pick-up into the flexible probe
- ▶ Select 2-stroke, 4-stroke or waste spark
- ▶ Select the measurement type and display format
- ▶ Place the coil on plug sensor on top of the ignition module, or the spark plug wire sensor over the spark plug wire
- ▶ The GTC505 will automatically detect and adjust all parameters to provide accurate measurements and clear graphs

### Displays and measures

- ▶ Waveforms in real time
- ▶ Spark plug peak voltage
- ▶ Spark burn (firing) time
- ▶ Coil primary current ramp time (COP and CNP)
- ▶ Dwell time (systems with spark plug wire)
- ▶ Engine RPM
- ▶ Maximum and minimum readings

### Useful for troubleshooting

- ▶ Non-starts
- ▶ Misfires
- ▶ Intermittent problems
- ▶ Primary and secondary coil circuit faults
- ▶ Fouled or damaged spark plugs
- ▶ Damaged spark plug wires

 Product designed and manufactured in Canada



### Multiple sensors and hook-up options

- ▶ All specially designed for use with the GTC505
- ▶ 30 cm (12") shielded flexible gooseneck with BNC and sensor connector
- ▶ Flexible gooseneck can be use with any sensor
- ▶ Electrically shielded spark plug wire sensors fit up to 8 mm diameter wires
- ▶ Active coil on plug (COP) sensor for optimal signal detection and rejection of interference from other ignition modules
- ▶ Automatic detection and configuration of the sensors

Spark plug wire sensor



Coil on plug sensor



## Technical specifications

- ▶ **Display:** 3.5" color TFT (320x240 pixels)
- ▶ **Flexible probe:** 30 cm (12") long coaxial gooseneck with BNC and sensor connector
- ▶ **Coil on plug sensor:** Active type, 14 mm x 52 mm
- ▶ **Spark plug wire sensor:** Shielded capacitive type, 35x13x13 mm, with 8.5 mm opening
- ▶ **Power source:** Rechargeable LiFePO4 battery
- ▶ **Battery life:** 6 hrs of continuous operation
- ▶ **Power saving:** Automatic power off
- ▶ **Physical dimensions:** 6.5"(H) x 4.9"(W) x 1.4"(D) or 165 mm x 124 mm x 36 mm (without probe)
- ▶ **Weight:** 14.8 oz or 420 g (without probe)

### RPM measurement

- ▶ Range: 120 to 19,999 RPM
- ▶ Resolution: 1 RPM
- ▶ Accuracy:  $\pm 0.5\% + 1$  LSD

### Spark (peak) voltage

- ▶ Range: 0 to 50 kV
- ▶ Resolution: 0.1 kV
- ▶ Repetitivity:  $\pm 0.2$  kV

### Spark burn (firing) time

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

### Ignition primary current ramp time (COP mode)

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

### Dwell time (spark plug wire)

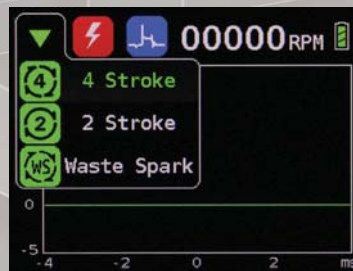
- ▶ Range: 0 to 10.0 ms
- ▶ Resolution: 0.1 ms
- ▶ Accuracy:  $\pm 0.1$  ms + 1 LSD

### GTC505m set includes:

- ▶ GTC505
- ▶ Flexible probe
- ▶ Coil on plug (COP) sensor
- ▶ Spark plug wire (SPW) shielded capacitive sensor
- ▶ USB micro cable and AC charger adapter
- ▶ Protective rubber holster
- ▶ Hard carrying/storage case
- ▶ User's manual
- ▶ 1-year parts and labor warranty

### GTC-CSC (sold separately)

- ▶ 2 m extension cable, can be used with coil on plug, spark plug wire and clip-on spark plug wire sensors
- ▶ Clip-on spark plug wire sensor



Works on 2-stroke, 4-stroke, and waste spark ignition system engines.



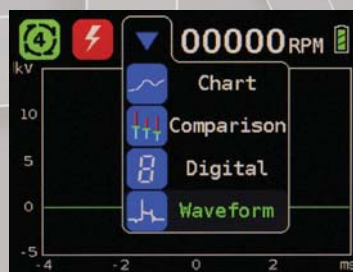
Displays secondary ignition waveforms.



Measures and displays spark burn (firing) time, dwell time, current ramp time, RPM, and spark plug peak voltage.



Compare sets of values (minimum, average and maximum readings) between several cylinders.



Every measurement can be displayed in compare mode, chart mode, analog gauge / digital readout or waveforms.



Analog gauge and digital readout with maximum and minimum.



6+ hours of working time when starting with a fully charged battery.



Unique chart mode makes easier to detect intermittent or infrequent failures and misfires.