

GTC505m

Engine Ignition Analyzer

Quick, powerful and easy to use

- ▶ Plug the appropriate sensor pick-up into the flexible probe
- ▶ Select the type of ignition system
- ▶ 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
- ▶ 350 mm (13.78") shielded flexible gooseneck with BNC and sensor connector
- ▶ Flexible gooseneck can be used 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

Clip-on spark plug wire sensor

Technical specifications

- **Display:** 3.5" color IPS LCD (320x240 pixels)
- **Flexible probe:** 350 mm (13.87") 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, 35x18x18 mm, with 9 mm opening
- **Power source:** Rechargeable 18650 LiFePO4 battery
- **Battery life:** 4 hrs of continuous operation
- **Charging connector:** USB Type-C compatible receptacle
- **Power saving:** Automatic power off
- **Physical dimensions:** 166 mm x 99.5 mm x 33.5 mm 6.5"(H) x 3.9"(W) x 1.3"(D) - (without probe)
- **Weight:** 335 g or 11.82 oz (without probe)

RPM measurement

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

Spark (peak) voltage

- Range: 1.5 to 50 kV
- Resolution: 0.01 kV
- Repetitivity: ± 0.2 kV

Spark burn (firing) time

- Range: 0.3 to 8 ms for COP and 0.3 to 13.3 ms for SPW
- Resolution: 0.01 ms
- Accuracy: ± 0.1 ms + 1 LSD

Ignition primary current ramp time (COP mode)

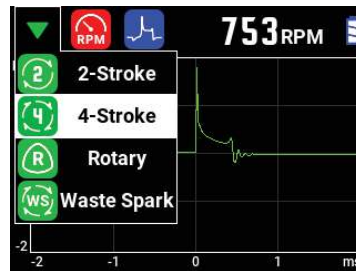
- Range: 0 to 10.0 ms
- Resolution: 0.01 ms
- Accuracy: ± 0.1 ms + 1 LSD

Dwell time (spark plug wire)

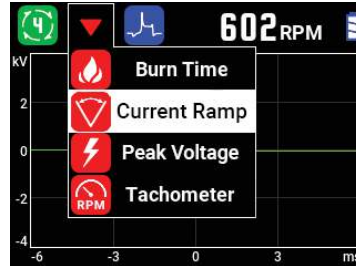
- Range: 0 to 35.55% for distributor and 0 to 17.77 ms for distributorless systems
- Resolution: 0.01 ms
- Accuracy: ± 0.1 ms + 1 LSD

GTC505m set includes:

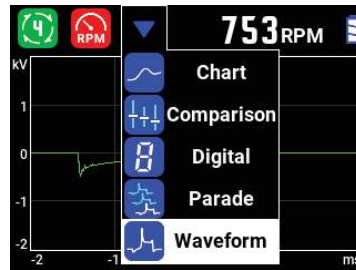
- GTC505
- Flexible probe
- Coil on plug (COP) sensor
- Spark plug wire (SPW) shielded capacitive sensor
- Clip-on spark plug wire sensor
- 2.10 m (82.6") extension cable, (for use with coil on plug, spark plug wire and clip-on spark plug wire sensors)
- USB Type-C cable
- Protective rubber holster
- Hard carrying/storage case
- User's manual
- 1-year parts and labor warranty



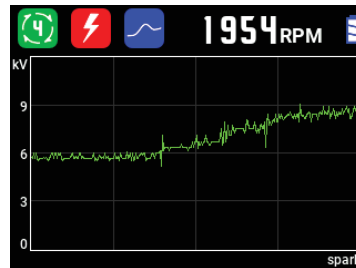
In Coil-on-Plug systems it works on 2-stroke, 4-stroke, rotary and waste spark ignition system engines.



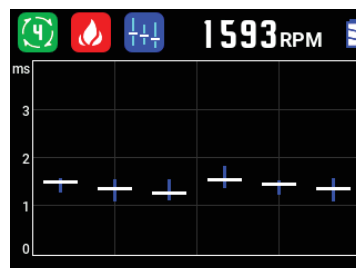
In Coil-on-Plug systems it measures and displays spark burn (firing) time, dwell time, current ramp time, RPM, and spark plug peak voltage.



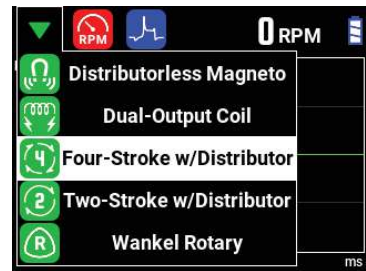
Every measurement can be displayed in compare mode, chart mode, analog gauge / digital readout, parade or waveforms.



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



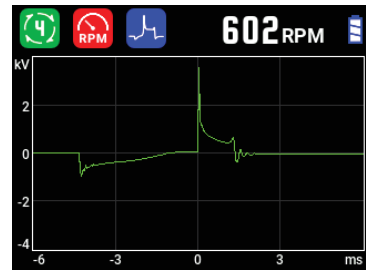
Compare sets of values (minimum, average and maximum readings) between several cylinders.



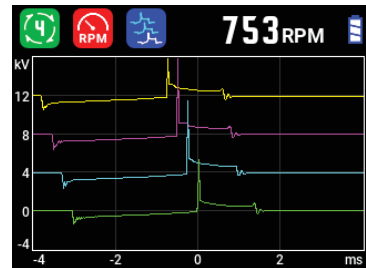
In Spark plug wire systems it works on distributorless magneto, dual-output coil, 2-stroke and 4-stroke with distributor, and rotary (Wankel) engines.



In spark plug wire systems it measures and displays spark burn (firing) time, dwell duty cycle and dwell time, RPM, and spark plug peak voltage.



Displays secondary ignition waveforms.



Parade allows to compare waveforms between up to four cylinders.



Analog gauge and digital readout with maximum and minimum.

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