TRYTE TECHNOLOGY (H.K.) LIMITED
Tryte Instrument Manufacture Co.,LTD
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1、PORTABLE OCTANE ANALYZER （OCTANE & CETANE）

Detail Introduction:

Parameter	Description	According
Measurement of octane level.	Research (RON), motor (MON) method. Anti Knocking Index AKI (Pump octane number PON).	ASTM D 2699-86, ASTM D 2700-86.
Measurement of cetane level.	Simultaneously with cetane number the type and temperature of hardening of diesel fuel is defined.	ASTM D 4737-03, ASTM D 613, EN ISO 5165.
Measurement freezing-point of diesel fuel.	It is defined depending on cetane numbers of diesel fuel.	Facultative parameter.
Measurement type of diesel fuel.	Type of diesel fuel. (S-summer, W-winter, A-arctic) is defined depending on temperature of hardening.	Facultative parameter.

Portable octane analyzer is used for instant octane rating of motor gasoline, corresponding to motor and research methods (RON and MON) as well as for cetane number of diesel fuels. In addition for an inquiries, temperature rating of the analyzed liquid and diesel fuel solidification is provided. The results of measuring are displayed on the LCD.

The operational principle of the **Octane Meter** lies in gasoline octane rating and diesel fuel cetane rating based on the analysis of change of properties of an dielectric permeability and electromagnetic induction.

Octane analyzer has the portable compact design and is used for on-line inspection of motor fuel quality in the field and laboratory conditions. The operating conditions of the **Octane analyzer** usage: ambient temperature from –10C to +30C, relative humidity 80% at 25 C, atmosphere pressure 84-106kPa. The device gets power from DC elements of type AA (supply voltage 6V).

The delivery package of Octane Meter TR-100K consists of the following components:

- Electronic unit;
- Sensor;
- Sample imitator;
- User manual;
- RS 232 computer connecting cable;
- Software CD;
- Tool case;
- AA Batteries.

Advantages of Octanemeter TR-100K

You can take measurements and make the measurement table in Microsoft Excel format which include the information about sample at the same time;

The correction of the measurment become much easier;

The information about the work of octane tester, correction, and measurment data are display on the screen of the computer;

Capability to update fuel parameters database (make an individual measurement program for customer needs).

2、PORTABLE OCTANE ANALYZER （OCTANE & CETANE）

Instrument Capabilities:

Determining octane numbers for motor petrols. Complies with ASTM D 2699-86, ASTM D 2700-86.

Determining cetane numbers for diesel. Complies with ASTM D 4737-03, ASTM D 613, EN ISO 5165.

Determining solidification temperature and diesel fuel type.

Content of pour-point depressants for diesel fuels.

Content of kerosine in diesel fuel.

Petrol breakdown time (oxidative stability). Complies with ASTM D 525.

Product Introduction:

New oil products grade analyzer is manufactured on the basis of advanced high precision microprocessor. the instrument can be used together with a PC a laptop through USB interface. Analyzer uses automatic computer-based calibration, saving measured data in the instrument memory with analysis date and time followed by their transfer to the PC (in Microsoft Excel or txt format). The instrument has easy of control attrition and aggressive environments resistive 8-key antiglare keyboard (made in Germany).

When determining petrol breakdown time, the petrol brand is selected in the instrument. The instrument switches to corresponding operating mode. Oxidative stability determination complies with GOST 4039-88 (ASTM D 525)
The instrument uses the timer microchip, which allows storing measurement results with analysis date and time. These data can also be transmitted to the computer.

New computer software is included into the set.
- measurement results are reflected on computer screen in convenient form;

Parameter description	Measurement units	Value
Measured petrols octane numbers range	ON	40–125
Acceptable limit of octane number measurement basic error, max	ON	± 0.5
Limit of acceptable difference between parallel octane number measurements, max	ON	± 0.2
Petrol oxidation breakdown time measurement range	min.	50-2400
Acceptable basic error limit of petrol oxidation breakdown time	%	5
Cetane numbers measurement range	CN	20–100
Acceptable basic error limit of cetane numbers, max	CN	±1.0
Acceptable difference limit between cetane numbers parallel measurements, max	CN	± 0.5
Acceptable error limit when determining diesel-fuel pour point	C °	± 2
Kerosine content determination range in diesel fuels	%	0-95
Mode for pour point depressants content determination for diesel fuel	%	3
Acceptable basic error limit when determining kerosene content in diesel fuels	%	0.2-1
Acceptable basic error limit when determining of pour point depressants content	%	0.01
Measurement time	s	1–5
Insufficient power supply indication operation threshold	V	5.4
Instrument useful life	years	6
Overall dimensions of:		
electronic module	mm	211x100x45
sensor #1 and #2:	mm	60x100
Instrument mass with one sensor/two sensors	gr	850

Delivery package:

Electronic computing module
Detector #1
Sample imitator
Software disk
mini-USB cable
Operations manual
Certification

Warranty certificate
Tool canvas bag

Product Differentiation

Function / Feature	TR-100K	TR-150	TR-300
Octane number / cetane number measurement	x	x	x
Diesel hybrid type measurement (winter/summer/arctic)	x	x	x
Freezing point temperature (diesel)	x	x	x
With built-in memory	x	x	x
PC / RS-232 interface	x		
PC / USB interface		x	x
Oil Purity Measurement			x
Transformer oil fission voltage measurement			x
Transformer oil dielectric dissipation measurement			x
Fuel oil conductivity measurement			x
Antiknock parameter measurement			x
Diesel pour point depressant content		x	x
Kerosene content in diesel		x	x
Gasoline oxidation stability		x	x
Circuit breaker oil, oil failure tangent angle measurement			x
Motor oil, circuit breaker oil clear level measurement			x
Motor oil brand			x
Engine oil base			x
Oil permeability			x
Oil volume resistivity			x
Measurement of mechanical impurities in oil			x
Percentage of water in oil			x

Product Package: