EDI – engine diagnostic system

Engine Diagnostic Instrument
Portable

ADDITIONAL SOFTWARE

EDI cooperates with the **EdiSoft** application, which makes detailed data analysis and logging easier.

Users of the **EDI** systems are entitled to free-of-charge software and firmware updates.

MEASUREMENT RESULT ANALYSIS

After taking measurements, the database with the collected results can be sent via e-mail to a qualified mechanic, who can diagnose the engine based on those results.

What is the EDI-Portable?

The **EDI-Portable** (**E**ngine **D**iagnostic **I**nstrument) is a portable diagnostic device system, designed for measurement and logging of compression pressure and fuel injection pressure in engines equipped with indicator cocks. Thanks to this, characteristics of the pressure present in the system can be extracted to a crank angle function. The use of that characteristic allows for diagnostic of the current state of the engine. The system includes algorithms for calculating the indicated engine power, maximum pressure (P_{max}), and the rotational speed and position of the shaft.

Why use the EDI device?

Thanks to periodical diagnostics and precise engine adjustments when using the **EDI** system, you save time, money and help the natural environment. The capabilities that the **EDI** system possesses, allow for precise indication of the elements that should be fixed, without the need for a complete overhaul.

The main advantages when using the **EDI** system are:

- Fuel consumption reduction (even by 20%)
- Engine maintenance cost reduction
- Engine efficiency increase
- Failure detectability increase
- Engine components life extension
- Service stop cost losses decrease
- Engine operational safety increase
- Exhaust gas emission decrease
- Engine characteristics shown on a built-in graphic display (thanks to which, connecting to a PC is not needed)
- Possibility of measuring a large number of engine cylinders during one measurement cycle
- Continuous engine monitoring
- An easy way to create engine work documentation

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Possibilities of the EDI-Portable device

TECHNICAL SUPPORT

Training in operating **EDI** systems can be provided by us or our commercial partners.

WATER-PROOF CASING

EDI–Portable has a water-proof and shock-resistant casing.

CONTACT

Address:

UL. Okrężna 1

81-822 Sopot

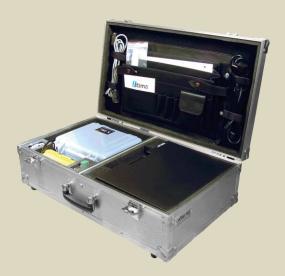Tel./Fax.:(+48 58) 341 16 61

Mail:

ultima@ultima-automatyka.pl

Web:

www.ultima-automatyka.pl

www.ultima-automatics.com

The main characteristics of the device are:

- Measurements of the compression chamber pressure, fuel injection pressure, indicated engine power, maximum pressure (P_{max}) and the engine shaft's rotational speed
- Pressure characteristics can be determined without the use of rotational speed and shaft position sensors
- The TDC point may be adjusted for the whole engine or individual cylinders
- The results can be shown as graphs and charts on the built-in graphic display
- Easy data exchange between the device and a PC
- Possibility of measurement logging of 8 18-cylinder engines

Easy operating and reliability

Operating the device is easy and the clear & legible menu is user friendly. The measurements can be done automatically or manually. All those features allow the user to perform complete measurements of a standard engine in no more than 15 minutes.

The data exchange between an **EDI** device and a PC is performed with an **EdiSoft** application, which allows for data importing via "drag & drop" techniques.

The reliability of the device has been confirmed during work in the toughest conditions.

Technical parameters

Parameter	Description
Supply voltage	Battery supply or 110-230 VAC, 50/60 Hz
Display	TFT 5.7", color, graphical
Serial communication ports	1xRS232, 1xRS232/RS485
Work environment relative humidity	20%...95%
Work environment temperature	-30˚C…70˚C
Battery supply work time	8 h
Battery supply charge time	6 h
Connectors	2x Lemo 1B5, 1x Lemo 2B6, 1x Lemo 0B5
Flash memory	Up to 64 MB
Casing protection degree	IP67
Weight	2,5 kg
Dimensions	270x246x124 mm
Catalogue Number	12-01-0101-01

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