

# Engine Analyser EPM-XPplus-vibro

advanced combustion pressure measurement incl. vibro-acoustic diagnostic

- High accuracy
- Automatic TDC correction
- Automatic Pcomp calculation
- IPOWER and IMEP calculation
- Advanced visualisation software
- Monitoring of injection and valve timing



# Advanced features

- Comprehensive analysing software for ships- and power plant application
- Vibro-acoustic sensor for detection of fuel injection valve timing
- Direct data transfer to IPE (IMES Performance Evaluation software)

# Application:

2 stroke engines: 40–950 RPM
4 stroke engines: 200–1800 RPM



More than 20 hours

#### Technical Data

Measuring range	0300 bar
Accuracy (EPM-XP <sup>plus</sup> incl. HTT <sup>®</sup> sensor)	+/- 0,5 % full scale (static)
Sampling resolution	0,1°CA
Max. temperature at measuring cell	300 °C (short time 350 °C)
Storing capacity	20 measurements / engine
Online measurement	Via USB- / Ethernet cable
Interface	USB-2.0
Battery	4 x NiMh AAA 930 mAh
Weight incl. sensor and adaptor	1100 g
Dimension incl. protection cover	210 x 100 x 80 mm



# Monitoring and diagnostic

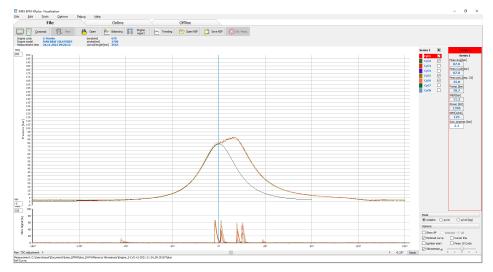
The vibro-acoustic sensor as part of the EPM-XPPIus offers advanced diagnostic options for marine engines. For the measurement it will be magnetically installed e.g., on the injector. During cylinder pressure indication the vibro-acoustic sensor records the point of lifting and landing of the injector needle as well as the beginning and ending of the fuel supply by the injection pump.

The experience in the performance analysis of marine engines shows, that the analysis of vibration diagrams, that have been recorded parallel to the indicator diagrams, delivers advanced diagnostic information.



Vibro-acoustic sensor magnetically mounted on injector valve

IW-1548



Scope of supply Part no.

EPM-XP plus-vibro incl. instrument case

- EPM-XP plus-vibro unit incl. protection cover
- HTT® cylinder pressure sensor(1m cable length)
- Vibro-acoustic sensor (1m cable length)
- Battery 4 x NiMh AAA 930 mAh
- Visualisation software for WIN 7 and WIN 10  $\,$
- USB connecting cable (1m)
- Thompson adaptor(W27x1/10") incl. mounting tool
- Instrument case

# Option:

- IMES Performance Evaluation software (IPE)	IW-8050
- Pressure pump coupling for thompson adaptor	IW-1574
- Thread cleaner for thompson thread	IW-1571
- USB extender incl. 20m Ethernet cable	IW-1561

imes gmbh . dr.-herbert-kittel-str. 2 . 87600 kaufbeuren fon +49(0) 8341 96 61 73 0 fax +49(0) 8341 96 61 73 18 e-mail: info@imes.de . www.imes.de