Newly developed and part of CMT’s modern range of PREMET® diesel performance analysers the PREMET® M is the way to go if you are looking for an economic approach to monitor your engines without sacrificing quality and accuracy. Brand new technologies give the user an unparalleled accuracy and will ensure you are getting results you can act on. Designed by marine engineers to be used from marine engineers the PREMET® M helps balancing cylinder load, optimise injection timing and detect worn or damaged engine components and thus reducing the engine’s operating cost.

Balancing the cylinder load helps extend engine life, increases efficiency, and reduces emissions to assist with environmental compliance.

Proper ignition timing reduces exhaust gas temperature and the rate of excess carbon build-up. Tuning the engine may reduce specific fuel oil consumption (SFOC). For each degree that the ignition is retarded SFOC increases by approximately 2%. The PREMET® M may protect against costly downtime by implementing predictive maintenance. Major defects can be easily detected. Engine maintenance can be planned, thus saving in parts and labor by changing engine parts based on need, not on timed intervals.

The PREMET® M has a rugged housing and uses a Kistler PiezoSMART pressure sensor of latest design which is being connected to the indicator valve of the cylinder for a measurement. 4-stroke engines can be measured without pick up with high accuracy but to achieve an even higher accuracy a pick up can be used. For the measurement of 2-stroke engines a pair of pick up is available as optional extra. The integrated compensation of torsional vibrations enables an unparalleled accuracy when measuring on 2-stroke engines.

The PREMET® M is compact, easy to use and very intuitive. Data is being exported via USB and can be analyzed further with the software supplied together with the device. For personnel managing multiple vessels CMT offers a Fleet Management Software.

The non-volatile memory stores up to 18 engine records or up to 125 cylinders. The angle precision of the PREMET® M is 0.17 deg. The max. cylinder pressure the sensor can be used with is 350 bar.

CM Technologies GmbH offers a measurement evaluation service to help you getting the most out of your CMT instrument. Also individual training courses can be arranged either at CMT, at your office or even on board.

### Specification

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignition pressure range</td>
<td>0-350 bar</td>
</tr>
<tr>
<td>Sensor</td>
<td>Kistler 6013 CSF</td>
</tr>
<tr>
<td>Speed range</td>
<td>20-3000 rpm</td>
</tr>
<tr>
<td>Max. number of engines</td>
<td>18</td>
</tr>
<tr>
<td>Max. number of cylinders over all engines</td>
<td>125</td>
</tr>
<tr>
<td>Max. temperature</td>
<td>400°C</td>
</tr>
<tr>
<td>Compensation of torsional vibration</td>
<td>✔</td>
</tr>
<tr>
<td>Compensation of pressure vibration</td>
<td>✔</td>
</tr>
<tr>
<td>Display</td>
<td>Alphanumeric, size 75 x 25 mm, resolution 20 x 4 char</td>
</tr>
<tr>
<td>Accuracy</td>
<td>0.17% degree crank angle</td>
</tr>
</tbody>
</table>

### Ordering Information

- **DPA-CT-12021**
  - PREMET® M Device
  - KISTLER Piezo-SMART-Sensor
  - New Premium Analysis Software PREMET Viewer

- **DPA-CT-12022**
  - PREMET® TDC pick up for 4-stroke engines

- **DPA-CT-12023**
  - PREMET® pair of Pick ups for 2-stroke engines

- **DPA-CT-12029**
  - Optical TDC Pick-up for 4-stroke engines

- **DPA-CT-12024**
  - PREMET® Fleet Management Software

- **DPA-CT-12027**
  - 15m Premet pick up connection cable

- **DPA-CT-12028**
  - DPA evaluation service

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**Your Benefits**

- Shock prove protector available
- Newly designed using up to date technology
- New analysis software
- Fleet Management software available
- Rugged design for onboard use
- High accuracy
- DNV GL Eco Insight ready
- Economic initial costs
- Exchange Sensor without new calibration of the device