DELTA 1600-V

EXHAUST GAS ANALYZER
for up to 9 engine parameters

MOBILE CAR EXHAUST GAS ANALYZER
FOR ALL GASOLINE AND DIESEL ENGINES

Modern, rugged metal enclosure designed for toughest applications
Effective integrated sample gas conditioner with gas cooler, condensate pump and auto-zero solenoid valve.

- Highly accurate measurements of exhaust gas parameters for motor-vehicles
- Large, high-contrast and backlit graphical display with zoom function
- Individual, user definable display and printout settings
- Automatic self test of software and hardware functions
- Integrated, electric gas cooler unit
- Automatic condensate draining pump
- Integrated high speed thermal printer
- PC Data-visualization and evaluation software
- Automatic zeroing using an isolation valve and activated carbon filter
- Universal power supply: mains 90-264 Vac / 100W / 60Hz
- RS 232 interface and data memory for approx. 7500 measurements.
- Automatic zeroing using a 3-way solenoid valve and activated carbon filter
Basic equipment:
Modern, rugged metal enclosure designed for the toughest applications
Effective integrated sample gas conditioner with gas cooler, condensate pump and auto-zero solenoid valve.
Optimized filter elements for protection against dust and soiling
High-speed printer with easy paper loading

Standard measurement of:
- O2 0 ... 22.00 % (electrochemical cell, long-life)
- CO2 0 ... 10.00 % (NDIR sensor)
- CO 0 ... 20.00 % (NDIR sensor)
- HC (n-hexane) 0 ... 20,000 ppm (NDIR sensor)

Optional measurement of:
- CO 0 ... 4.000 ppm (electrochemical cell, option 61752)
- NO 0 ... 4.000 ppm (electrochemical cell, option 61759)
- NO2 0 ... 1.000 ppm (electrochemical cell, option 59731)
- Motor oil temperature 32°F ... 302°F (0 ... 150 °C) (NiCrNi thermocouple probe, option 61763)

Calculations:
- NOx or true NOx = NO + NO2, when NO2 cell is installed
- Lambda (Brettschneider formula)
- PEF (propane equivalency factor)

TECHNICAL SPECIFICATIONS

DELTA 1600-V Portable vehicle exhaust gas analyzer

<table>
<thead>
<tr>
<th>Measurement components</th>
<th>Measuring range</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>O2 Oxygen</td>
<td>0 ... 22%</td>
<td>OIML-class 1</td>
</tr>
<tr>
<td>CO2 Carbon Dioxide</td>
<td>0 ... 20%</td>
<td>OIML-class 1</td>
</tr>
<tr>
<td>CO Carbon monoxide</td>
<td>0 ... 10%</td>
<td>OIML-class 1</td>
</tr>
<tr>
<td>HC Hydrocarbons</td>
<td>0 ... 20,000 ppm</td>
<td>OIML-class 1</td>
</tr>
<tr>
<td>NO Nitric oxide</td>
<td>0 ... 4.000 ppm</td>
<td>OIML-class 1</td>
</tr>
<tr>
<td>NO2 Nitrogen dioxide</td>
<td>0 ... 1.000 ppm</td>
<td>OIML-class 1</td>
</tr>
<tr>
<td>SO2 Sulfur dioxide</td>
<td>0 ... 5,000 ppm</td>
<td>OIML-class 1</td>
</tr>
<tr>
<td>Lambda</td>
<td>0...9.99</td>
<td></td>
</tr>
<tr>
<td>PC interface</td>
<td>RS232</td>
<td></td>
</tr>
<tr>
<td>Data Storage</td>
<td>7500 measurements</td>
<td></td>
</tr>
<tr>
<td>Probe</td>
<td>length 400 mm, flexible</td>
<td></td>
</tr>
<tr>
<td>Sample gas line</td>
<td>5mtr. Viton</td>
<td></td>
</tr>
<tr>
<td>Filtering</td>
<td>Pre- and fine-filter</td>
<td></td>
</tr>
<tr>
<td>Exhaust gas temp</td>
<td>max. 1200°F (650°C)</td>
<td></td>
</tr>
<tr>
<td>Ambient temp</td>
<td>41°F to 113°F (+5° - +45°C)</td>
<td></td>
</tr>
</tbody>
</table>

General specifications
- Operation temperature 40°F .... 100°F, max. 95 % RH, none condensing
- Storage temperature -4°F ...... 120°F
- Ambient conditions not in aggressive, corrosive or high dust ambience, not for use in hazardous areas
- Power supply approx. 2 hours battery operation with gas cooler, without heated gas sampling line
- Grid power supply 100 ... 250 Vac / 47 ... 63 Hz
- Protection class IP21
- Weight approx. 15.4 lbs (without transport case, bag, trolley)
- Dimensions (W x H x D) 21” x 19” x 12”