

OPTIMA7 NDIR

HAND HELD AUTOMOTIVE NDIR GAS ANALYZER



O2

CH4

CO2

CO

NOx

NO

°F

Δ°F



since 1984 ®

AIR fair

EMISSION MONITORING SYSTEMS

Over 30 years of innovative gas analysis!

- Measurement of up to 5 car exhaust gas components:
 - ▶ CO, CO2, HC (NDIR)
 - ▶ O2 and NOx (electrochemical)
- Lambda calculation
- Engine oil temperature
- P.E.F. factor

Suitable for real time measurements of petrol (gasoline) and diesel car exhaust gas.

Intuitive software menu and bright colour display will guide you through all measuring programs. Electrochemical cells for O₂ and NO together with high-tec NDIR bench for CO, CO₂ and HC measures fast and accurate the exhaust gas.

Store up to 16,000 data sets directly in the analyzer's internal data storage or on micro-SD card, or even use Bluetooth™ for wireless data transfer to notebook or MRU4u data app for smartphone or tablet. Printing via infrared, high speed thermal printer is at the tip of your fingers.

Main features:

- >> Exhaust gas measurement for all petrol (gasoline) and diesel engines
- >> Engine oil temperature measurement
- >> P.E.F. factor (required for calibration)
- >> High-range CO measurement using infrared bench
- >> Rechargeable Lithium-Ion battery for approx. 8 hours operation
- >> Lambda calculation using Brettschneider formula
- >> Automatic measurement with averaging
- >> O₂ longlife sensor

TECHNICAL SPECIFICATIONS

| OPTIMA 7 analyzer | | Handheld analyzer with 3 gas NDIR and electrochemical sensors | | | |
|------------------------------|-----------------|---------------------------------------------------------------|--------------------------------------|----------|---------------------------------------------------------------------------------|
| Measured components | | Measuring range | Resolution | Accuracy | |
| CO | Carbon monoxide | NDIR | 0 ... 16.000 Vol.-% | 0.001% | ± 0.02 % or 3% reading ** |
| CO ₂ | Carbon dioxide | NDIR | 0 ... 20.00 Vol.-% | 0.01% | ± 0.03 % or 5% reading ** |
| HC | Hydrocarbon | NDIR | 0 ... 20,000 ppm | 1 ppm | ± 12ppm or 3% of reading ** |
| O ₂ | Oxygen | Electro-chem | 0 ... 25.00 Vol.-% | 0.01% | ± 0.2 % Vol. abs |
| NO | Nitric oxide | Electro-chem | 0 ... 1,000 / 5,000 ppm* | 1 ppm | ± 5 ppm or 5 % reading up to 1,000 ppm ** or 10 % reading up to 5,000 ppm ** |
| Engine oil temperature T.oil | | | 0 ... 392 °F | 0.1°F | ± 4 °F |
| Airtemperature T. Air | | | 0 ... 212 °F | 0.1°F | ± 2 °F |
| Differential pressure | | | - 40 ... + 40 inH ₂ O hPa | 0.01 hPa | ± 0.02 hPa |

*overload range recommend only for short time measurements

**which ever is larger

| Calculated values | |
|-------------------|-----------------------------------|
| Lambda | 0 ... 99,9 (using Brettschneider) |
| P.E.F. | propane equivalency facto |

| General specifications | |
|------------------------|------------------------------------------------------------------------------|
| Operation temperature | 41°F 113°F, max. 95 % RH, non condensing |
| Storage temperature | -4°F 122°F |
| Data storage | up to 16,000 data sets |
| Ambient conditions | not in aggressive, corrosive or high dust environments, not for use in hazar |
| Power supply | Lithium-Ion battery, 6 to 8 hours operation |
| Grid power supply | 100 - 240 V AC / 50 ... 60 Hz 1A |
| Protection class | IP30 |
| Weight | approx. 2.2 lbs. |
| Dimensions | (W x H x D) 4.3" x 8.8" x 2.04" |

Data subject to change without notice

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