

Residential Combustion Analyzer



Flue Gas Analyzer with Direct CO₂ Measurement











Functions

- Measures: CO, CO2, Flue Temperature, Inlet temperature
- Calculates: O2, Differential Temperature, Efficiency (Net, Gross), Excess Air

Features

- Backed by UEi Service+
- Up to 10-Year warranty with annual recertification
- Large 6-line backlit display
- Heat Exchanger test
- 2 levels of sensor protection
- NOx filtered CO sensor
- Low Flow Detection to protect reading accuracy
- High altitude compensation
- Temperature Differential w/ K-Type probe inputs
- Protective water trap
- Print to optional printer
- 8 pre-programmed fuels
- Protective rubber boot with magnet
- DMM-style rotary dial



Includes

- Probe (CP2)
- Rechargeable batteries 3 (AA)
- USB Charging cable (AACA5)
- Quick Start Guide (201996)



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Specifications

Temperature Measurement

| Parameter | Range | Resolution | Accuracy |
|-------------------------------------|----------------------------|---------------|--------------------------|
| Flue Temperature | 32° to 1112°F (0° to 600°) | 0.1°F (0.1°C) | ±(0.3% rdg +3.6°F (2°C)) |
| Inlet Temperature (Internal Sensor) | 32° to 122°F (0 to 50°C) | 0.1°F (0.1°C) | ±2°F (1°C) |
| Inlet Temperature (External Sensor) | 32° to 1112°F (0° to 600°) | 0.2° (0.1°C) | ±1.0°F (0.5°C) |

Flue Gas Measurement

| Parameter | Range | Resolution | Accuracy |
|---------------------------|-------------------|------------|--|
| Carbon Monoxide | 0 to 2000 ppm | 1 ppm | ±3 ppm or ±5% rdg (whichever is greater) |
| (Optional H2 Compensated) | 2000 to 10000 ppm | 1 ppm | ±10% rdg |
| Carbon Dioxide | 0 to 20% | 0.1% | ±0.3% volume |

Calculations

| Parameter | Range | Resolution | Accuracy |
|---------------------------|-------------|------------|--------------|
| Oxygen | 0 to 21% | 0.1% | ±0.3% volume |
| Efficiency (Net or Gross) | 0 to 99.9% | 0.1% | ±1% rdg |
| Excess Air | 0 to 119.9% | 0.1% | ±0.2% rdg |

| Pre- Programmed Fuels | Natural Gas, Propane, LPG, Light Oil, Heavy Oil, Bio Oil, Pellets |
|-----------------------|--|
| Battery Life | >8 hours (continuous with pump on) |
| Certification | The C161 is TUV-tested and certified to EN 50379, Parts 1-3 in accordance to 1st German Federal Emission Control Ordinance (BimSchV) |
| Operating Conditions | |
| Temperature | 32° to 113°F (0° to 45°C) |
| Humidity | 15% to 90% R.H. |
| Storage Temperature | 0° to 113°F (-18° to 50°C) |
| Power Supply | Rechargeable Batteries, USB Charging |
| Dimensions | |
| Dimensions | 8.54" x 4.18" x 1.86" |
| Weight | 1 lb., 5.1 oz. |

Downloads



Data Sheet



Manual





Available Kits









| | C161C | C1610IL | C161KIT | C1610ILKIT |
|--|--------------|--------------|--------------|--------------|
| UPC | 053533509250 | 053533509373 | 053533509236 | 053533509366 |
| Analyzer/Probe | • | • | • | • |
| Batteries/Charging Cable | • | • | • | • |
| Carrying Case | • | • | • | • |
| Quick Start Guide (201991B) | • | • | • | • |
| K-type Temp Probes/Spare Filter | | | • | • |
| Printer/Spare Paper Roll | | | • | • |
| Smoke Pump Tester (for oil-fired appliances) | | • | | • |