

Fyrite® INSIGHT® Plus Combustion Analyzer

Five-in-one instrument with full-color graphical display for all of your emission analysis

The Fyrite INSIGHT Plus is a handheld residential and commercial combustion analyzer ideal for use by HVAC contractors, home inspectors, maintenance personnel, and energy auditors. Select from nine preprogrammed fuels and measure combustion efficiency, room air carbon monoxide, flue gas carbon monoxide, two channels of temperature, and differential pressure. The B-Smart® sensor technology allows precalibrated CO sensor replacement in the field (order replacement sensor separately).

new



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Dynamic full-color graphical display features multiple display options. The standard display shows numerical values for the parameters; the graphical trend screen displays a line graph of the selected parameter over time; the bar graph screen displays up to three parameters in bar graphs with user-defined limits; and the dynamic hot-spot screen is used to locate the hot spot in the flue, based on the stack temperature.

- Nine preprogrammed and two custom fuels
- Store up to 100 records for recall on the display
- Easily navigate the menu system through the function and arrow buttons
- Zoom function allows you to increase the character size on the display for easier viewing
- User diagnostics include O₂ sensor life indications and calibration reminders
- Versions with reporting kit include an IrDA printer, USB cable, and software

| SPECIFICATIONS | | | |
|------------------------------------|---|-------------------------|--|
| Parameter | Measuring range | Resolution | Accuracy |
| O ₂ | 0 to 20.9% | 0.1% | ±0.3% |
| CO | 0 to 4000 ppm | 1 ppm | ±10 ppm from 0 to 200 ppm; ±5% from 201 to 4000 ppm |
| CO ₂ (calculated) | 0.1 to a fuel-dependent max in % | 0.1% | — |
| Air temperature | −4 to 600°F (−20 to 316°C) | 0.1°F/C | ±1°C |
| Flue temperature | −4 to 1202°F (−20 to 650°C) | 1°F/C | ±3.6°F (2°C) from 32 to 255°F (0 to 124°C); ±5.4°F (3°C) from 257 to 480°F (125 to 249°C); ±7.2°F (4°C) from 482 to 752°F (250 to 400°C) |
| Combustion efficiency (calculated) | 0.1 to 100% | 0.1% | — |
| Excess air (calculated) | 1 to 250% | 1% | — |
| Differential temperature | ±1112°F (600°C) | 0.1°F/C | — |
| Differential pressure | ±100 mBar (40 in. WC) | 0.01 mBar (0.01 in. WC) | ±0.03 mBar from −1 to 1 mBar; ±3% from −40 to −1 mBar; ±3% from 1 to 40 mBar |
| Fuels | Natural gas, oil #2, oil #4, oil #6, propane, coal, wood, kerosene, B5 (biodiesel 5%) | | |
| Display | 3" color graphical LCD, backlit | | |
| Dimensions (W x H x D) | 3 ⁵ / ₈ " x 8" x 2 ³ / ₈ " (91 x 203 x 58 mm) | | |
| Power | Four AA alkaline batteries or optional universal AC adapter | | |

What's included: sensor, CO sensor (calibrated at manufacturer), probe and hose assembly, spare filters, rubber boot, hard carrying case, and four AA alkaline batteries.

| Catalog No. | Model No. | Description |
|-------------|-----------|---|
| TS-86505-50 | 0024-8515 | Fyrite INSIGHT Plus combustion analyzer with standard 2-year O ₂ sensor |
| TS-86505-51 | 0024-8517 | Fyrite INSIGHT Plus combustion analyzer with long-life 3-year O ₂ sensor |
| TS-86505-52 | 0024-8516 | Fyrite INSIGHT Plus combustion analyzer with standard 2-year O ₂ sensor and reporting package kit |
| TS-86505-53 | 0024-8518 | Fyrite INSIGHT Plus combustion analyzer with long-life 3-year O ₂ sensor and reporting package kit |
| Accessories | | |
| TS-86505-61 | 0024-1592 | CO sensor (not calibrated) |
| TS-86505-62 | 0024-1616 | B-Smart CO sensor (precalibrated) |
| TS-86505-57 | 0104-1797 | Type K thermocouple probe for ambient air measurements, 1" (2.5 cm) length |
| TS-86505-58 | 0104-1798 | Type K thermocouple probe for flue measurements, 10 ft (3 m) length |
| TS-86505-59 | 0024-8242 | Differential pressure and temperature kit |
| TS-86505-60 | 0024-1591 | Replacement long-life 3-year O ₂ sensor |
| TS-86505-63 | 0024-8257 | Long-life 3-year O ₂ sensor upgrade kit |
| TS-86505-54 | 0024-1492 | Fyrite INSIGHT Plus reporting kit (IrDA printer, USB cable, and software) |
| TS-10111-31 | 0024-1400 | IrDA printer with disposable batteries |
| TS-86505-55 | 0024-1310 | Printer paper, 5 rolls/pk |
| TS-86505-56 | 0024-1611 | Universal AC power adapter |
| TS-09386-01 | — | Replacement batteries, AA, 4/pk |