



### selectable fuels

Natural Gas  
Oil #2  
Oil #6  
Kerosene  
Propane  
Coal  
Digester Gas  
Wood



## New Hand-Held Combustion & Emissions Analyzer

This new product adds a large touch-screen display to a full feature residential, commercial, and light industrial grade analyzer, to provide the ideal tool for the service technician who needs to determine carbon monoxide (CO) safety, combustion efficiency, and emissions compliance. The touch-screen display shows 11 different measurements and calculations at one time in a large font. It directly measures flue gas O<sub>2</sub>, CO, NO, NO<sub>2</sub>, SO<sub>2</sub>, stack and ambient temperature, pressure and draft. The Fyrizer also calculates and displays combustion efficiency, stack loss, excess air, CO<sub>2</sub>, NO<sub>x</sub>, and dew point temperature. Additionally, the Fyrizer calculates CO, NO, NO<sub>2</sub>, SO<sub>2</sub>, and NO<sub>x</sub> to a user selected O<sub>2</sub> reference.

The Fyrizer comes standard with advanced communication capabilities and data storage for 890 complete combustion records. Through its built in IR port, you can download test information to a printer or PC for record keeping. Customer information can be entered quickly and easily into the analyzer's memory with the full-character touch-screen display.



NOTE: Add B to beginning of part number when ordering.

### Instrument comes with:

A 12 inch probe with 10 ft. hose and cable, probe stop, ambient temperature probe, additional water trap and soot filters, leather case with magnetic holders, battery charger, hard carrying case, and instruction manual. All instruments include O<sub>2</sub>, CO, and memory storage for 890 complete combustion records. Upgrades for CO (high), NO, NO<sub>2</sub>, and SO<sub>2</sub> are available.

| SPECIFICATIONS  |   |   |
|---|---|---|
| Measurement Ranges  | Oxygen  | 0.1 to 20.9%  |
|   | Carbon Monoxide   | 0 to 4000 ppm (hydrogen compensated)  |
|   | Carbon Monoxide (high)*   | 4001 to 16000 ppm   |
|   | Nitric Oxide*   | 0 to 2000 ppm   |
|   | Nitrogen Dioxide*   | 0 to 500 ppm  |
|   | Sulfur Dioxide*   | 0 to 4000 ppm   |
|   | Stack Temperature   | 0 to 1562 F   |
|   | Primary/Ambient Air Temperature   | 0 to 257 F  |
|   | Pressure/Draft  | ± 15.7 inches WC  |
|   | Calculation Ranges  | Combustion Efficiency   |
| Stack Loss  |   | 0 to 100 %  |
| Excess Air  |   | 0 to 250 %  |
| Carbon Dioxide (dry basis)                                |   | 0 to a fuel dependent max. value  |
| NO <sub>x</sub> (NO <sub>x</sub> = NO + NO <sub>2</sub> ) |   | 0 to 2500 ppm   |
| CO referenced to O <sub>2</sub>                           |   | 0 to 32000 ppm  |
| NO referenced to O <sub>2</sub>                           |   | 0 to 32000 ppm  |
| NO <sub>2</sub> referenced to O <sub>2</sub>              |   | 0 to 32000 ppm  |
| NO <sub>x</sub> referenced to O <sub>2</sub>              |   | 0 to 32000 ppm  |
| SO <sub>2</sub> referenced to O <sub>2</sub>              |   | 0 to 32000 ppm  |
| Accuracy  | Oxygen  | ± 0.3% O <sub>2</sub>   |
|   | Carbon Monoxide   | ± 5% of Rdg or ± 20 ppm whichever is greater (0 to 2000 ppm) ± 10% of Rdg (2001 to 16000 ppm) |
|   | Nitric Oxide  | ± 5% of Rdg or ± 5 ppm whichever is greater   |
|   | Nitrogen Dioxide  | ± 5% of Rdg or ± 5 ppm whichever is greater   |
|   | Sulfur Dioxide  | ± 5% of Rdg or ± 10 ppm whichever is greater  |
|   | Stack Temperature   | ± 4 F (0 to 257 F)<br>± 6 F (258 to 481 F)<br>± 8 F (482 to 751 F)                            |
|   | Primary/Ambient Temperature   | ± 2 F   |
| Pressure/Draft  | ± 3% of Rdg or 0.02 inches WC   |   |
| Size  | 5.8" H x 7.6" W x 2" D  |   |
| Weight  | 3.6 lbs with batteries and probe  |   |
| Power Source  | Four AA size rechargeable NiCad batteries, min. of 4 hours of continuous operation. |   |
| Warm-up Time  | 60 seconds  |   |
| Warranty  | 2 years on instrument   |   |

\* optional

### Distributed By:

Apex Instruments, Inc.  
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| ORDERING INFORMATION            |   |   |
|---------------------------------|---|---|
| MODEL/PN                        | MEASUREMENTS  | FEATURES  |
| <b>Model 250</b><br>24-8234     | Oxygen<br>Carbon Monoxide<br>Stack temperature<br>Primary/Ambient Temperature<br>Pressure/Draft | Memory storage of 890 records<br>Backlighted display<br>Manual CO overload protection<br>Wireless interface to printer & PC |
| <b>Model 260</b><br>24-8235     | Same as Model 250 plus CO (high)  | Same as Model 250   |
| <b>Model 270</b><br>24-8236     | Same as Model 250 plus NO & NO <sub>2</sub>   | Same as Model 250   |
| <b>Model 280</b><br>24-8237     | Same as Model 250 plus SO <sub>2</sub>  | Same as Model 250   |
| <b>Model 290</b><br>24-8238     | Same as Model 250 plus NO & SO <sub>2</sub>   | Same as Model 250   |
| <b>Model 270 Kit</b><br>24-8239 | Same as Model 270 plus sample conditioning  | Same as Model 250   |
| <b>Model 280 Kit</b><br>24-8246 | Same as Model 280 plus sample conditioning  | Same as Model 250   |
| <b>Model 290 Kit</b><br>24-8247 | Same as Model 290 plus sample conditioning  | Same as Model 250   |

| AVAILABLE SPARE PARTS AND ACCESSORIES |  |
|---------------------------------------|--|
| PART NO.                              | DESCRIPTION  |
| 24-0788                               | Replacement O <sub>2</sub> sensor                          |
| 24-8248                               | Replacement CO sensor                                      |
| 24-1336                               | Replacement CO (high) sensor                               |
| 24-0881                               | Replacement NO sensor                                      |
| 24-1027                               | Replacement NO <sub>2</sub> sensor                         |
| 24-0998                               | Replacement SO <sub>2</sub> sensor                         |
| 07-1646                               | Replacement soot filters (5 pcs)                           |
| 07-1651                               | Replacement cotton filters (25 pcs) need more description  |
| 07-1652                               | Replacement cotton filters (150 pcs) need more description |
| 07-1653                               | Replacement water stop filters (3 pcs)                     |
| 24-1229                               | IrDA Printer   |
| 24-1310                               | Printer Paper (5 rolls)                                    |
| 24-1337                               | IrDA receiver for PC                                       |
| 24-1313                               | 10 ft. hose extension                                      |
| 24-1314                               | Connector (for hose extension)                             |
| 24-1183                               | Probe tube (7" long)                                       |
| 24-1184                               | Probe tube (12" long)                                      |
| 24-1185                               | Probe tube (20" long)                                      |
| 24-1186                               | Probe tube (39" long)                                      |
| 24-1311                               | Leather Case   |
| 24-1312                               | Shoulder strap   |
| 24-1315                               | 4" Primary / Ambient temperature probe with 6 ft. lead     |
| 24-1316                               | 11" Primary / Ambient temperature probe with 6 ft. lead    |
| 24-1319                               | 2" Primary / Ambient temperature probe                     |
| 24-7059                               | Calibration Kit  |

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