



# AMPRO<sup>1000</sup>

COMBUSTION ANALYZER



**PRICE LIST 2024**  
VALID 04/01 - 12/31/2024

**Handheld Combustion Analyzer**

For combustion checking and adjustment of residential and industrial boilers  
TÜV according to 1. BimSchV and EN 50379/1+2

**BASIC CONFIGURATION AND FUNCTION**

- O<sub>2</sub> measurement: 0 - 21,00% (O<sub>2</sub> long-life Sensor)
- CO/H<sub>2</sub> compensated measurement 0 - 10,000 / 20,000 ppm <sup>(short-term overload)</sup>
- CO ambient measurement
- Stack / Differential pressure: -100mbar ... +100mbar
- Differential temperature measurement
- O<sub>2</sub> referencing (normalization) to user settable value
- Complete combustion calculation using large, country specific fuel type list
- Large, optimizes condensate separator with PTFE (Teflon) coated PTFE filter
- Touch panel, backlit color TFT display
- Intuitive, menu guided software over touch panel
- Mini-USB interface to PC and SD-card slot for large volume data logging
- Internal data storage for up to 1,000 measurements!
- Micro-SD card slot for high volume data storage to optional micro-SD card
- IRDA interface for high speed infrared thermal printer
- Modern, slim line enclosure with fixing magnets
- Robust glass fiber reinforced gas and differential pressure connectors
- Li-Ion battery for min. 10 hours operation time, rechargeable over USB port
- Wall-plug, universal grid power supply 90-240Vac / 50-60Hz / 5Vdc
- Including standard gas sampling probe with fixed, 9.84" x Ø 0.31" (250 mm x Ø 8 mm) stainless tube and 5 foot (1.5 m) triple silicone gas sampling hose
- Including nickel plated cone
- PC software \*MRU4win\* for data collection, measurement report, address management
  - \* "light" \* version, available in MRU download area
  - \* "complete" \* version optionally available, see next page under "DOCUMENTATION / DATA TRANSFER / PC SOFTWARE"

**FUEL TYPES:**

all known fuel types, like: natural gas, light oil, heavy oil, coal, wood, pellets and others

**COMBUSTION CALCULATIONS (fuel type dependent):**

- |  |                                       |
|--|---------------------------------------|
| · CO <sub>2</sub>                            | · Dew point                           |
| · CO/CO <sub>2</sub> ratio (poisoning index) | · Combustion efficiency (ETA)         |
| · Excess air and air ratio (Lambda)          | · Heat losses (using Siegert formula) |

**OPTIONAL FUNCTIONS OF THE DELTAsmart:**

- Combustion air temperature: 32 ... 212°F (0 ... 100°C) with K-type thermocouple
- Gas temperature measurement up to 2,192°F (1200°C) with K-type thermocouple and corresponding probe

**AMPRO 1000**

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**Price list valid till: 12/31/2024**

<b>AMPRO 1000 - as described above</b>				<b>QTY</b>	<b>Part No.</b>	<b>Unit price</b>	<b>Discount</b>	<b>Total Price</b>
AMPRO 1000 combustion analyzer				<b>1</b>	<b>690122</b>	<b>\$1,299.00</b>	<b>0%</b>	<b>\$1,299.00</b>
• O2 sensor Long-life	0 -	21%						
• CO (H2 compensated) sensor	0 -	10,000 ppm	overload 20,000 ppm					

<b>AMPRO 1000 - as described above</b>				<b>QTY</b>	<b>Part No.</b>	<b>Unit price</b>	<b>Discount</b>	<b>Total Price</b>
AMPRO 1000 combustion analyzer				<b>1</b>	<b>690125</b>	<b>\$1,417.00</b>	<b>0%</b>	<b>\$1,417.00</b>
• O2 sensor Long-life	0 -	21%						
• CO (H2 compensated) sensor	0 -	10,000 ppm	overload 20,000 ppm					
• ABS transport case								

<b>AMPRO 1000 - as described above</b>				<b>QTY</b>	<b>Part No.</b>	<b>Unit price</b>	<b>Discount</b>	<b>Total Price</b>
AMPRO 1000 combustion analyzer				<b>1</b>	<b>690126</b>	<b>\$1,666.00</b>	<b>0%</b>	<b>\$1,666.00</b>
• O2 sensor Long-life	0 -	21%						
• CO (H2 compensated) sensor	0 -	10,000 ppm	overload 20,000 ppm					
• Speed printer								
• ABS transport case								



# 690125



# 690126

<b>SENSORS electro-chemical</b>					QTY	Part No.	Unit price	Discount	Total Price
Sensor OPTION - NO	with calculated NOx	0 - 5,000 ppm	overload 10,000 ppm (*1)		1	65752	\$561.00	0%	\$561.00

<b>STORAGE AND TRANSPORTATION</b>					QTY	Part No.	Unit price	Discount	Total Price
Robust transport case DELTAsmart for instrument, probe, printer and accessories					1	65699	\$130.00	0%	\$130.00
Robust transport case DELTAsmart for instrument, probe, printer and handheld soot pump					1	10144	\$188.00	0%	\$188.00
Robust transport case DELTAsmart for instrument, probe, printer, handheld soot pump and additional accessories					1	10143	\$280.00	0%	\$280.00

<b>SOFTWARE OPTIONS and DOCUMENTATION</b>					QTY	Part No.	Unit price	Discount	Total Price
MRU4win - "full" version software, for real time data acquisition and handling on PC with Windows10					1	10539	\$287.00	0%	\$287.00
Bluetooth module for wireless data transfer to PC and MRU4u App					1	66173	\$120.00	0%	\$120.00
RETROFIT - Bluetooth module for wireless data transfer to PC and MRU4u App					1	10153	\$202.00	0%	\$202.00
Micro-SD card including adapter to standard SD card reader					1	65758	\$23.70	0%	\$23.70
High speed easy paper loading IR printer (to be charged with analyzer charger)					1	63677	\$373.00	0%	\$373.00

<b>INDUSTRIAL PROBE HANDLE - Additional probe tube needed (different lengths available)</b>					QTY	Part No.	Unit price	Discount	Total Price
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**Industrial Probe handle with sampling line.**  
Industrial probe handle for exchangeable probe tubes; integrated NiCrNi thermocouple; type "K" connector  
Silicone gas sampling hose and Silicone draft hose; stainless steel connectors. With:  
*Additional probe tube needed - see below*

Sampling line and handle VITON - 4.92' (1.5 m)	1	65796	\$198.00	0%	\$198.00
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**NOTE: Add-on price to instrument price!!! (Delivery without standard gas sampling probe)**

<b>EXCHANGEABLE PROBE TUBE FOR INDUSTRIAL PROBE HANDLE (Cone is included)</b>					QTY	Part No.	Unit price	Discount	Total Price
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exchangeable probes tube with cone

Exchangeable probe tube	7" x 0.3"	(180 mm x 8 mm)	High grade steel	≤ 1472°F (800°C)	1	55548	\$204.00	0%	\$204.00
Exchangeable probe tube	12" x 0.3"	(300 mm x 8 mm)	High grade steel	≤ 1472°F (800°C)	1	55583	\$150.00	0%	\$150.00
Exchangeable probe tube	20" x 0.3"	(500 mm x 8 mm)	High grade steel	≤ 1472°F (800°C)	1	59292	\$415.00	0%	\$415.00
Exchangeable probe tube	20" x 0.4"	(500 mm x 10 mm)	High grade steel	≤ 1472°F (800°C)	1	55806	\$529.00	0%	\$529.00
Exchangeable probe tube	30" x 0.4"	(750 mm x 10 mm)	High grade steel	≤ 1472°F (800°C)	1	55672	\$389.00	0%	\$389.00
Exchangeable probe tube	40" x 0.4"	(1000 mm x 10 mm)	High grade steel	≤ 1472°F (800°C)	1	55673	\$403.00	0%	\$403.00

<b>EXCHANGEABLE PROBE TUBE FOR INDUSTRIAL PROBE HANDLE (Cone is included)</b>					QTY	Part No.	Unit price	Discount	Total Price
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Exchangeable probe tube	20" x 0.3"	(500 mm x 8 mm)	Inconel	≤ 2000°F (1100°C)	1	63927	\$1,271.00	0%	\$1,271.00
Exchangeable probe tube	30" x 0.4"	(750 mm x 10 mm)	Inconel	≤ 2000°F (1100°C)	1	60626	\$668.00	0%	\$668.00
Exchangeable probe tube	40" x 0.4"	(1000 mm x 10 mm)	Inconel	≤ 2000°F (1100°C)	1	56737	\$787.00	0%	\$787.00

<b>FLEXIBLE PROBE TUBE FOR INDUSTRIAL PROBE HANDLE (Cone is included) ≤ 1472°F (800°C)</b>					QTY	Part No.	Unit price	Discount	Total Price
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Exchangeable probe tube	6" x 0.3"	(150 mm x 8 mm)	High grade steel	(with draft measurement)	1	12853	\$942.00	0%	\$942.00
Exchangeable probe tube	6" x 0.3"	(150 mm x 8 mm)	High grade steel	(without draft measurement)	1	58883	\$287.00	0%	\$287.00

<b>CONSUMABLES and OTHER ACCESSORIES</b>					QTY	Part No.	Unit price	Discount	Total Price
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Hand soot pump with accessories					1	51833	\$231.00	0%	\$231.00
Soot paper (1 pack = 200pcs.)					1	11700	\$12.40	0%	\$12.40
Soot comparison scale					1	11701	\$14.80	0%	\$14.80
Ambient air temperature probe, short plug style / K-type plug directly on analyzer socket					1	61434	\$27.30	0%	\$27.30
Combustion air temperature probe 7.87" with PTFE cone and 10' cable					1	62928	\$209.00	0%	\$209.00
Combustion air temperature probe 3.54" with magnet holder and 10' cable					1	62934	\$170.00	0%	\$170.00
Replaceable PTFE filter elements for condensate separator (washable and reusable up to 5 times)					1	10156	\$19.40	0%	\$19.40
Printer paper, thermal paper, 58 mm x 20 m (1 pack. = 5 rolls)					1	59465	\$20.20	0%	\$20.20
Service and cleaning set					1	65770	\$100.00	0%	\$100.00

## SALES TERMS & CONDITIONS

### A. Acceptance/Agreement

All orders are subject to acceptance by MRU Instruments, Inc. Additional or different terms or any attempt by the Buyer to vary, in any degree, any of the terms of this sales agreement form shall be deemed material and are objected to or rejected, but this sales agreement form shall not operate as a rejection of the Buyer's offer unless it contains variances in the terms of the description, quantity, price or delivery schedule of the goods.

### B. Payment Terms

MRU Instruments payment terms are net 30 days unless special written arrangements have been made. MRU Instruments, Inc. may, at any time, suspend performance of any order or require payment in cash, security or other adequate assurance satisfactory to MRU Instruments, Inc. when, in MRU Instruments' opinion, the financial condition of Buyer or other grounds for insecurity warrant such action. MRU Instruments, Inc. reserves the right to assess late charges on accounts due past 30 days at the rate of 18% per annum. All goods are shipped Ex Works and are the property of the Buyer upon shipment.

### C. Cancellation/Termination

Upon written notice of cancellation or termination for the Buyer's convenience of standard catalog items, for standard product only, the Buyer is subject to a minimum 15% charge on the remaining balance and a charge reflecting a reversion to the quantity pricing of items actually delivered. In the event that the goods are special, non-standard or custom the Buyer may terminate this order in whole or in part for its convenience upon written notice to MRU Instruments, Inc. in which event MRU Instruments, Inc. shall be entitled to termination charges consisting of a percentage of the order price reflecting the percentage of the work performed prior to termination plus actual direct costs resulting from termination.

### D. Remedies in the Event of Cancellation or Default

In the event the Buyer cancels this order, or becomes overdue on its account payable to MRU Instruments, Inc. by failing to pay for this order when due in accordance with the terms hereof, in addition to the charges assessed to the Buyer pursuant to Paragraphs B and C of this Agreement, the buyer shall be required to pay all costs of collection, including, whether suit be brought or not, attorney fees, court costs, collection expenses and other expenses which MRU Instruments, Inc. may incur or pay in the prosecution of defense of its rights hereunder whether in judicial proceedings at law or in equity, including bankruptcy court and appellate proceedings, or whether out of court. In addition, MRU Instruments, Inc. shall retain the right to terminate this Agreement and Buyer's right to use the Software (as term is defined below) upon any material breach of this Agreement by Buyer. Buyer agrees to return to MRU Instruments, Inc. or to destroy all copies of the Software upon termination of this Agreement.

### E. Delivery

The promised delivery date is the best estimate possible, based upon current and anticipated manufacturing capabilities, of when the product will be shipped. MRU Instruments, Inc. assumes no liability for loss, damages or consequential damages due to delay.

In any event, MRU Instruments, Inc. shall not be in default for any failure to deliver Products to Buyer by the promised delivery date. In the event that MRU Instruments, Inc. so defaults, Buyer's sole remedy for such default shall be cancellation of the applicable order. MRU Instruments, Inc. shall have no other liability to Buyer as a consequence of any such default.

### F. Force Majeure

Fulfillment of this order is contingent upon the availability of materials. MRU Instruments, Inc. shall not be liable for any delay in delivery or for non-delivery in whole or in part caused by the occurrence of any contingency beyond the control of either MRU Instruments, Inc. or suppliers to MRU Instruments, Inc. including but not limited to delay in transportation, labor disruption, earthquake, fire, acts of God, or any other act outside of MRU Instruments, Inc.'s reasonable control.

### G. Warranty

MRU Instruments, Inc. expressly warrants that the materials covered by this sale will conform to the specifications, drawings or other descriptions specified by the Buyer or if none are so specified, to MRU Instruments' standard specifications for such material. The materials will be new and unless specified to the contrary on the order acknowledgment or invoice, will be free of all liens and encumbrances.

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MRU Instruments, Inc. shall not be liable for any incidental, special, indirect or consequential damages, losses or expenses directly or indirectly arising from the sale whether in contract, tort, or any other legal theory. In any event, MRU Instruments' liability hereunder is expressly limited to the repair or replacement (at MRU Instruments' option) of non-conforming goods or, at MRU Instruments' election, to the repayment or crediting to Buyer the purchase price of such goods.

### H. Claims/Notice of Defects

Failure of the Buyer to object in writing to any merchandise shipped to it by MRU Instruments, Inc. within 30 days after receipt thereof will constitute complete acceptance by Buyer of such merchandise. Rejected material must be returned to MRU Instruments, Inc. within 45 days after receipt and with prior authorization from MRU Instruments, Inc. MRU Instruments, Inc. may (at its option) recondition or replace the rejected material to meet Buyer's specifications within a reasonable time period after receipt. Claims for shipping damage must be made with the carrier.

All products must be returned in the same packing conditions in which it left MRU Instruments, Inc.' manufacturing location(s) (anti-static rails and boxes, adequately protected, etc.). Buyer must pay return shipping.

### I. Confidential Information

All drawings, diagrams, specifications and other materials furnished by MRU Instruments, Inc. and identified as confidential, or information which the Buyer knows or has reason to know is confidential, proprietary or trade secret information of MRU Instruments, Inc., relating to the use and service of articles furnished hereunder and the information therein, are proprietary to MRU Instruments, Inc.. Buyer may not reproduce or distribute such materials except to buyer's employees who may use the articles as part of their duties.

Customer agrees that it will take all reasonable measures to maintain the confidentiality of all confidential information in its possession or control, which will in no event be less than the measures it uses to maintain the confidentiality of its own information of equal importance. Accordingly, MRU Instruments, Inc. will be entitled to preliminary and permanent injunctive relief and other equitable relief for any breach of this Section I.

Buyer further acknowledges and agrees that the sale of products to Buyer does not convey any license express or implied, and Buyer shall not, manufacture, modify, reverse engineer, duplicate, otherwise copy or reproduce any of the products or any part thereof. MRU Instruments, Inc. will treat drawings, specifications or data furnished by Buyer as confidential, when identified as such, in connection with this purchase.

### J. General Provisions

Any cause of action arising from this agreement, or breach of it, must be commenced within one year after the cause of action occurs. MRU Instruments, Inc. reserves the right to correct any stenographical or clerical errors in any of the writings issued by it. The terms and conditions of sale and any description on the face of MRU Instruments' writings constitute a complete and exclusive statement of the terms and conditions of the sale of the goods by MRU Instruments, Inc. to Buyer unless amended in writing between Buyer and MRU Instruments, Inc. Buyer may not assign any rights to, or delegate any performance owed under the agreement without the written consent of MRU Instruments, Inc.

This Agreement will be governed by and construed in accordance with the laws of the State of Texas. Any suit hereunder will be brought solely in the federal or state courts of Harris County, Texas, and Buyer hereby submits to the personal jurisdiction thereof. This agreement, as amended by any posted notices, constitutes the entire terms and conditions on products offered for sale by MRU Instruments, Inc.

MRU Instruments, Inc. may amend this Agreement at any time by posting the amended terms on its web site. Except as stated below, all amended terms shall automatically be effective after they are posted on the web site. This Agreement may not be otherwise amended except in a writing signed by Buyer and MRU Instruments, Inc.

This agreement was last revised on January 30, 2007.