



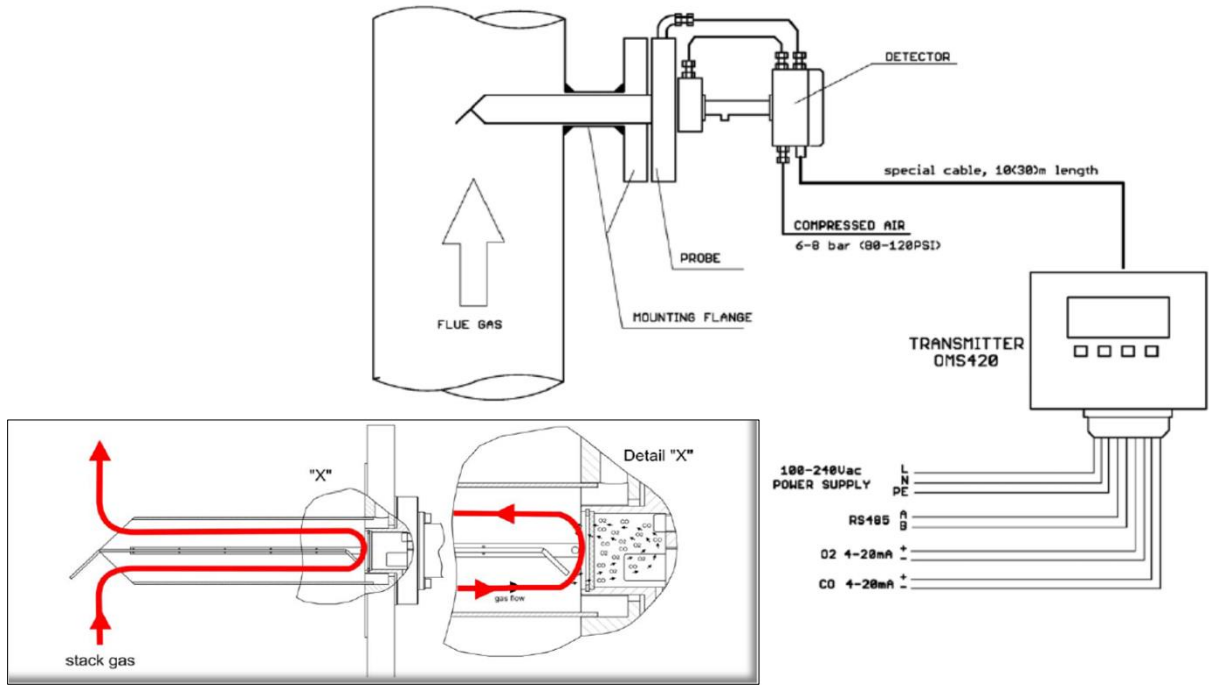
OMS 420

IN-SITU COMBUSTION OPTIMIZATION



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

**OMS 420
 IN-SITU O₂ and CO_e Analyzer**



The O₂ and CO_e monitor is dedicated for continuous combustion optimization at various industrial furnaces/ovens/boilers

Instrument main features are:

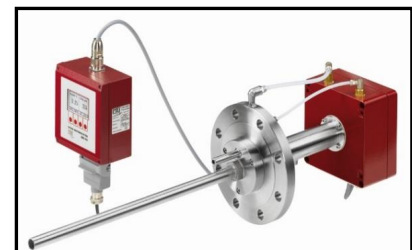
- easy and fast, on site replaceable detector head either with O₂ or with dual sensors O₂ & CO_e
- stainless steel SS316Ti mounting flange DN65-PN6,
- Inconel steel tube, with flow guidance design and lengths from 0,3m to 2m (others on special request)
- transmitter (control unit) with backlit display and operation key pad, IP65 die cast aluminum enclosure
- all password protected, intuitive software guided menu, with diagnosis software
- dual channel 4-20mA analog output and digital output RS485 (with Modbus RTU protocol)
- either temperature regulated ZrO₂ sensor for continuous O₂ oxygen measurement
- or unique, temperature regulated combi-sensor for oxygen and combustible O₂&CO_e measurement
- unique blow-back system for dusty flue gases (for models RT and HT)
- integrated auto-calibration for accurate measurements using PU420 (option)
- 24Vdc power supply of compact model and universal 100-240Vac/47-63Hz/100W power supply for RT and HT models
- industry compatible rugged design IP65, easy and fastest service design



OMS 420 - Compact model



**OMS 420-RT model
 without or with back purge option**



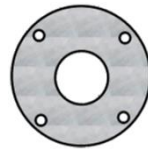
OMS 420-HT model

OMS 420 Monitor	QTY	Part No.	Unit price	Discount	Total Price
OMS420 model with compact transmitter - <i>select probe tube below</i> to monitor clean combustions only With ZrO2 sensor for O2 ; 4 – 20 mA & RS485 output; 24Vdc/100W power supply required (client scope of supply) Transmitter electronics mounted directly onto probe. <i>Maximum ambient temperature ≤ 120°F (50°C).</i>	1	110400	\$4,208.00	0%	\$4,208.00
SAME AS ABOVE - WITH ZrO2 sensor for O2 & COe Select according probe tube from below list:	1	110401	\$7,367.00	0%	\$7,367.00

OMS 420 RT - Monitor without BACK PURGE	QTY	Part No.	Unit price	Discount	Total Price
OMS420RT model with remote transmitter without BACK PURGE - <i>select probe tube below</i> to monitor clean combustions only with ZrO2 sensor for O2 and 10m special cable between probe and transmitter, with 4-20mA analog output and RS485 digital output including universal power supply 100...240Vac/24Vdc/100W	1	110500	\$4,984.00	0%	\$4,984.00
SAME AS ABOVE - WITH ZrO2 sensor for O2 & COe Select according probe tube from below list:	1	110501	\$8,144.00	0%	\$8,144.00

OMS 420 RT - Monitor WITH BACK PURGE	QTY	Part No.	Unit price	Discount	Total Price
OMS420RT model with remote transmitter WITH BACK PURGE - <i>select probe tube below</i> to monitor dusty combustions (flying ash type of dust) with ZrO2 sensor for O2 and 10m special cable between probe and transmitter, with 4-20mA analog output and RS485 digital output including universal power supply 100...240Vac/24Vdc/100W including automatic back-purge of probe tube by use of clean, oil and water free compressed air (6-8bar), solenoid valve controlled by transmitter electronics	1	110502	\$5,910.00	0%	\$5,910.00
SAME AS ABOVE - WITH ZrO2 sensor for O2 & COe Select according probe tube from below list:	1	110503	\$9,038.00	0%	\$9,038.00

PROBES for above models	QTY	Part No.	Unit price	Discount	Total Price
316Ti stainless steel DN65 PN6 flange. Back purge ready ≤ 1,100°F (600°C) Inconel steel DN65 PN6 flange. Back purge ready ≤ 1,800°F (1000°C) for use with compact model or remote transmitter model, for clean or dusty combustion, with flying ash dust type, prepared for back-purging using compressed air (clean, oil and water free), with stainless steel DN65 PN6 flange style and mounting material:					
PROBE DN65 11.81" ~ 0.98' (300mm) Inconel Steel 1800°F	1	62393	\$1,278.00	0%	\$1,278.00
PROBE DN65 19.68" ~ 1.64' (500mm) Inconel Steel 1800°F	1	62393A	\$1,427.00	0%	\$1,427.00
PROBE DN65 29.52" ~ 2.46' (750mm) Inconel Steel 1800°F	1	62393B	\$1,481.00	0%	\$1,481.00
PROBE DN65 39.35" ~ 3.28' (1000mm) Inconel Steel 1800°F	1	62393C	\$1,599.00	0%	\$1,599.00
PROBE DN65 49.19" ~ 4.1' (1250mm) Inconel Steel 1800°F	1	62393D	\$1,690.00	0%	\$1,690.00
PROBE DN65 59.03" ~ 4.92' (1500mm) Inconel Steel 1800°F	1	62393E	\$1,770.00	0%	\$1,770.00
PROBE DN65 68.87" ~ 5.74' (1750mm) Inconel Steel 1800°F	1	62393F	\$1,802.00	0%	\$1,802.00
PROBE DN65 78.71" ~ 6.56' (2000mm) Inconel Steel 1800°F	1	62393G	\$1,862.00	0%	\$1,862.00

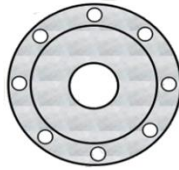


4" ANSI 150lbs adapter flange for use above DN65 style sampling tubes at sites with 4" ANSI-150lbs flanges	1	63607M	\$1,121.00	0%	\$1,121.00
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OMS 420 HT - Monitor	QTY	Part No.	Unit price	Discount	Total Price
OMS420HT model for high temperature with ZrO2 sensor for O2 and remote transmitter, probe with sample aspiration using an ejector (clean, oil and water free compressed air 6-8bar is required) with automatic back-purge using solenoid valve controlled by transmitter electronics with 10m special cable between probe and transmitter including universal power supply 100...240Vac/24Vdc,	1	110600	\$7,909.00	0%	\$7,909.00
SAME AS ABOVE - WITH ZrO2 sensor for O2 & COe	1	110601	\$11,069.00	0%	\$11,069.00

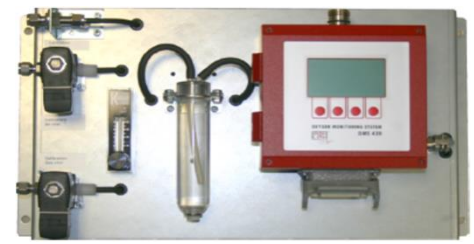
Select according probe tube from below list:

PROBES for HT Model	QTY	Part No.	Unit price	Discount	Total Price
Probe tube HT Only for use with OMS420HT model Only for use with OMS420HT model - or use at very high temperature combustion sites above 1800°F (1000°C) with stainless steel ANSI 4" 150lbs flange style, and:					
HT PROBE 19.68" ~ 1.64' (500mm) Inconel steel Ø22 x 2 mm 2012°F	1	64215A	\$352.00	0%	\$352.00
HT PROBE 29.52" ~ 2.46' (750mm) Inconel steel Ø22 x 2 mm 2012°F	1	64215B	\$567.00	0%	\$567.00
HT PROBE 39.35" ~ 3.28' (1000mm) Inconel steel Ø22 x 2 mm 2012°F	1	64215C	\$637.00	0%	\$637.00
HT PROBE 59.03" ~ 4.92' (1500mm) Inconel steel Ø22 x 2 mm 2012°F	1	64215E	\$757.00	0%	\$757.00
HT PROBE 19.68" ~ 1.64' (500mm) Kanthal steel Ø27 x 3,5 mm 2300°F	1	64216A	\$2,147.00	0%	\$2,147.00
HT PROBE 29.52" ~ 2.46' (750mm) Kanthal steel Ø27 x 3,5 mm 2300°F	1	64216B	\$2,201.00	0%	\$2,201.00
HT PROBE 39.35" ~ 3.28' (1000mm) Kanthal steel Ø27 x 3,5 mm 2300°F	1	64216C	\$2,211.00	0%	\$2,211.00
HT PROBE 59.03" ~ 4.92' (1500mm) Kanthal steel Ø27 x 3,5 mm 2300°F	1	64216E	\$2,921.00	0%	\$2,921.00
HT PROBE 29.52" ~ 2.46' (750mm) Ceramic Ø24 x 2,5 mm 3000°F	1	64217B	\$1,897.00	0%	\$1,897.00
HT PROBE 39.35" ~ 3.28' (1000mm) Ceramic Ø24 x 2,5 mm 3000°F	1	64217C	\$1,909.00	0%	\$1,909.00
HT PROBE 59.03" ~ 4.92' (1500mm) Ceramic Ø24 x 2,5 mm 3000°F	1	64217E	\$2,108.00	0%	\$2,108.00



OPTIONS & ACCESSORIES	QTY	Part No.	Unit price	Discount	Total Price
30m (90') special cable - replacement of standard 10m special cable of models OMS420RT or OMS420HT	1	63471	\$147.00	0%	\$147.00

OPTION PNEUMATIC UNIT PU420	QTY	Part No.	Unit price	Discount	Total Price
PNEUMATIC AUTO CAL PU420 only in combination with RT or HT models for automatic calibration using permanently attached calibration gas cylinder (calibration gas cylinder with mixture gas is user scope of supply) For automatic calibration - the pneumatic device is placed near to the probe - up to 10m distance together with the transmitter electronics and connected with special cable and hose to the probe OMS420RT. Instrument air or calibration gas is guided to calibration inlet port of the probe. The test gas (zero or span) is guided after moistening in the water bubbler to the calibration inlet port of probe detector flange and purging the sensing cells of the transmitter without the requirement to dismount the probe from the stack! NOTE: pressure of instrument air and pressure of calibration gas must be have the same value...approximate 1...2 bar!!!	1	110201	\$3,022.00	0%	\$3,022.00



SPARE PARTS	QTY	Part No.	Unit price	Discount	Total Price
Seal gasket for mounting flange ANSI150	1	61494	\$15.50	0%	\$15.50
Seal gasket for mounting flange DN65	1	52556	\$17.40	0%	\$17.40
Steel mash filter 35 x 2 mm, CrNi steel	1	62440	\$40.70	0%	\$40.70
Lock washer (1.4" x 0.06" (35 x 1.5 mm)	1	62427	\$11.20	0%	\$11.20
Locking plug for calibration inlet port	1	56912	\$32.90	0%	\$32.90
Solenoid valve (back purge)	1	61399	\$209.00	0%	\$209.00
O2 sensor (replacement sensor)	1	11984	\$1,558.00	0%	\$1,558.00
O2 / COe sensor (replacement sensor)	1	13731	\$4,197.00	0%	\$4,197.00

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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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.