



SWG 100 BIOGAS

BIOGAS ANALYZER



SWG 100 biogas	
CH4	60.54
CO2	38.83
H2S	198
O2	0.3
Net cal. vol.	19.7
Gross cal. vol.	21.9

SWG 100
biogas



MAU AIRfair
EMISSIION MONITORING SYSTEMS

PRICE LIST 2025
VALID 01/01/ - 12/31/2025

SWG 100 - BIO GAS ANALYZER**FOR BIOGAS**

**bio methane, landfill gas,
coal seam gas sites**



Due to technical improvements or changes, picture of analyzer might be changed without notice !

The complete, ready to use gas analysis system SWG100 is the rugged industrial analyzer to use with:

- biogas AD (anaerobic digester) plants, ethanol plants, pulp & paper plants
- cogeneration heat and power engines (CHP)
- bio methane plants (gas to grid)
- landfill gas monitoring and CHP
- municipal or industrial sewage water treatment sites
- coal seam gas sites

Instrument main features are:

- accurate measurements
- sampling from low suction -100mbar up to +250mbar
- no dilution of sample gas is required for O₂/CO₂/CH₄
- sample gas can have max 14ml/min condensate!!!
- direct and continuous & discontinuous measurement, with pressure and temperature compensation
- multiple sampling point monitoring (up to 10 sites monitoring) with one analyzer
- standard system safety included with continuous, monitored fan cabinet ventilation
- flow restrictor orifice gas inlet for high pressure site, with sample gas cut-off in case of alarm
- optional safety precautions to increase the safety level in use, including internal combustible gas detector (%LEL CH₄)
- industry compatible rugged design , easy and fastest service design
- ready to run delivery, minimum installation work

BASIC ANALYZER CONFIGURATION

- IP54 aluminum cabinet with anti-corrosive red structural lacquer and monitored fan ventilation
- regulated sample gas pump with sample gas flow monitoring and adjustment
- filtration of sample gas and of acid gases before internal sample flow sensor
- solenoid valve for auto-zero (with clean ambient air) and for automatic calibration using permanently attached gas mixture cylinder (user scope of supply)
- sample gas supply cut-off in case of system alarm, using "fail-safe" solenoid valve (normally closed) , including one sample gas sampling inlet port
- all stainless steel gas connectors 1/8"ID threads, with 6mm bulkhead compression fittings (also replaceable by user)
- stainless steel adapter 1/8" I - 1/8" O, with flow restrictor orifice, to be mounted at sample gas inlet from high pressure sampling
- human machine interface with color TFT display, keyboard and RS485 interface (Modbus RTU)
- all password protected, intuitive software guided menu, with diagnosis software and logbook
- 230Vac / 47-63Hz / 90W power supply, 115Vac power supply on request

SWG 100 BIOGAS

SWG 100 Biogas analyzer Ready to run after power up for raw biogas and/or biomethane and offgas measurements
<p>SWG 100 BIO - IP54 aluminum cabinet with anti-corrosive red structural lacquer and monitored fan ventilation</p> <ul style="list-style-type: none"> regulated sample gas pump with sample gas flow monitoring and adjustment filtration of sample gas and of acid gases before internal sample flow sensor sampling from low suction -100mbar up to +250mbar (including OPTION 12652) solenoid valve for auto-zero (with clean ambient air) and for automatic calibration using permanently attached gas mixture cylinder (user scope of supply) sample gas supply cut-off in case of system alarm, using "fail-safe" solenoid valve (normally closed), including one sample gas sampling inlet port all stainless steel gas connectors 1/8"ID threads, with 6mm bulkhead compression fittings (also replaceable by user) stainless steel adapter 1/8" I - 1/8" O, with flow restrictor orifice, to be mounted at sample gas inlet from high pressure sampling human machine interface with color TFT display, keyboard and RS485 interface (Modbus RTU) all password protected, intuitive software guided menu, with diagnosis software and logbook 230Vac / 47-63Hz / 90W power supply, 115Vac power supply on request <p>To be used with NDIR # 12142</p>

QTY	Part No.	Unit price	Discount	Total Price
1	951002	\$13,517.00	0%	\$13,517.00



SWG 100 Biogas analyzer Ready to run after power up UL / CSA CERTIFIED
<p>BIOGAS ANALYZER, SAME AS 951002 - PLUS ADDITIONAL</p> <ul style="list-style-type: none"> UL / CSA CERTIFICATION External Main Switch ON SITE START UP SUPPORT (UL MANDATORY)

QTY	Part No.	Unit price	Discount	Total Price
1	951006UL	\$16,017.00	0%	\$16,017.00



ON SITE START UP SUPPORT (UL MANDATORY)
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1	951006SU	\$4,000.00		\$4,000.00
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SWG 100 LFG analyzer Ready to run after power up WITH for raw biogas at LFG Plants
<p>BIOGAS ANALYZER, SAME AS 951002 - PLUS ADDITIONAL</p> <ul style="list-style-type: none"> Dilution system 1:50 for continuous measurement of H2S sample gas <p>To be used with NDIR # 12142</p>

QTY	Part No.	Unit price	Discount	Total Price
1	951002LFG	\$16,344.00	0%	\$16,344.00

SWG 100 Biogas analyzer Ready to run after power up for clean biogas - RNG / BIOMETHANE
<p>BIOGAS ANALYZER, SAME AS 951002 - TO BE USED WITH NDIR # 12823</p> <p>NOTE: sample gas with H2S higher than 50ppm is NOT recommended or consult with MRU</p>

QTY	Part No.	Unit price	Discount	Total Price
1	951030	\$13,831.00	0%	\$13,831.00

SWG 100 Biogas analyzer Ready to run after power up UL / CSA CERTIFIED for clean biogas - RNG / BIOMETHANE
<p>BIOGAS ANALYZER, SAME AS 951030 - PLUS ADDITIONAL</p> <ul style="list-style-type: none"> UL / CSA CERTIFICATION External Main Switch ON SITE START UP SUPPORT (UL MANDATORY) <p>NOTE: sample gas with H2S higher than 50ppm is NOT recommended or consult with MRU</p>

QTY	Part No.	Unit price	Discount	Total Price
1	951030UL	\$16,331.00	0%	\$16,331.00



ON SITE START UP SUPPORT (UL MANDATORY)
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1	951006SU	\$4,000.00		\$4,000.00
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NDIR for biogas at AD plants, landfill site			QTY	Part No.	Unit price	Discount	Total Price
NDIR for biogas at AD plants, landfill site	CH4 / CO2	0 - 100% / 0 - 100%	1	12142	\$3,158.00	0%	\$3,158.00
NOTE: * (using standard CH4 measurement)							

NDIR for Biomethane / Off-gas measurement			QTY	Part No.	Unit price	Discount	Total Price
NDIR for Biomethane	0 - 100ppm ... 100% CO2	0 - 3,000ppm ... 100% CH4	1	12823	\$6,900.00	0%	\$6,900.00
NOTE: * special ndir bench, with auto ranging from low ppm range, up to high % range							

NDIR for Coal Seam Gas (with selective CH4 measurement)			QTY	Part No.	Unit price	Discount	Total Price
NDIR for Coal Seam Gas	CH4 / CO2	0 - 100% / 0 - 100%	1	12140	\$5,272.00	0%	\$5,272.00
NDIR for Coal Seam Gas	0 - 3,000 ... 30,000ppm CO2	0 - 3,000 ... 30,000ppm CH4	1	13450	\$7,657.00	0%	\$7,657.00
NOTE: * using selective CH4 detector, for sites where different CnHm can be present in the sample gas							

SENSORS - electro chemical - and sensor OPTIONS			QTY	Part No.	Unit price	Discount	Total Price
Sensor OPTION - O2	Long Life	0 - 25 %	1	65419	\$966.00	0%	\$966.00
Sensor OPTION - H2S (*2)	H2 immune	0 - 50 ppm overload 250 ppm (*1)	1	12260	\$1,049.00	0%	\$1,049.00
Sensor OPTION - H2S (*4)		0 - 2,000 ppm overload 4,000 ppm (*1)	1	10479	\$1,169.00	0%	\$1,169.00
Sensor OPTION - H2S (*4)	H2 immune	0 - 5,000 ppm overload 10,000 ppm (*1)	1	13836	\$1,251.00	0%	\$1,251.00
Sensor OPTION - H2		0 - 1,000 ppm overload 2,000 ppm (*1)	1	12513	\$1,721.00	0%	\$1,721.00
Sensor OPTION - H2 (*5)		0 - 1 % overload 2% (*1)	1	12243	\$1,493.00	0%	\$1,493.00
Sensor OPTION - CO	H2 compensated	0 - 4,000 ppm overload 20,000 ppm (*1)	1	65968	\$1,104.00	0%	\$1,104.00
Cut-off sample gas and air purging system of H2Slow sensor			1	12269	\$513.00	0%	\$513.00
Dilution system 1:50 for continuous measurement of very high H2S sample gas			1	12117	\$2,827.00	0%	\$2,827.00
Pre-filtration H2S - for H2 sensor protection suitable for concentrations higher than 200 ppm			1	14736	\$546.00	0%	\$546.00

(*1) NOTE: is maximum overload range, suitable only for short measuring time (*2) NOTE: as stand-alone or in combination with #12269 plus #66051 or combined with #12117 dilution system
(*4) NOTE: the sensor can be used stand-alone or together with #12117 dilution system or with #12269 (*5) NOTE: use only in combination with H2 immune H2S sensor

OPTIONS			QTY	Part No.	Unit price	Discount	Total Price
Electric sample gas cooler (Peltier type)and condensate draining pump			1	65408	\$2,190.00	0%	\$2,190.00
Silica gel filter incl. mounting kit NOTE: to be used whenever gas cooler is not necessary because very dry sample gas (below 0°C dewpoint)"			1	13952	\$77.00	0%	\$77.00
Filtered condensate catch pot with automatic draining, (complete with fittings and canister)			1	11247A	\$858.00	0%	\$858.00
NOTE: only for mounting at wet & dirty sampling point with condensate higher than 14ml/min							
Standard sample point switching and monitoring (time sharing) ADD one for each additional sampling point MAX 9			1	65177	\$596.00	0%	\$596.00
Add-on cost using 0,3mm flow restrictor for high pressure of max +450mbar (Must be ordered additionally!)			1	14514	\$70.00	0%	\$70.00
Needle valve for use at high pressure site, from 50mbar to 250mbar			1	12652	\$436.00	0%	\$436.00
Pressure regulator, aluminum body, from up to 10bar inlet pressure to 0,2bar outlet pressure			1	12819	\$352.00	0%	\$352.00
NOTE: required also if zero gas is synthetic air or nitrogen							
Automatic calibration by using of 2 gas cylinders			1	12552-2	\$672.00	0%	\$672.00
Automatic calibration by using of 3 gas cylinders			1	12552-3	\$1,187.00	0%	\$1,187.00
NOTE: to be used at biomethane dual range infrared measurement (% and ppm ndir bench)							
Cabinet heater, temperature regulated, for freeze protection at low ambient air temperatures from -10°C to +5°C							
Cabinet heater 230 Vac - 200 W - for use in safe area only			1	65771	\$683.00	0%	\$683.00
Cabinet heater 115 Vac - 200 W - for use in safe area only			1	66009	\$683.00	0%	\$683.00
Heated Blanket, External Wrap for Ambient Conditions of up to -20 °F			1	999-Blanket	\$2,995.00	0%	\$2,995.00
110 VAC - self regulated							
Aluminum Frame awning to protect SWG from harsh and direct weather elements such as sun, rain, hail, and snow.			1	59979	\$916.00	0%	\$916.00
H 12 in, W 48 in, D 42 in, Assembly Required, Hardware Included, Rust Resistant, Water Resistant							

DATA TRANSFER / Software			QTY	Part No.	Unit price	Discount	Total Price
RS485 to USB converter			1	62543-A	\$306.00	0%	\$306.00
RS485 to Profi-Bus converter			1	66029	\$1,061.00	0%	\$1,061.00
RS485 to Ethernet converter			1	66030	\$736.00	0%	\$736.00
MRU4win - "full" version software, for real time data acquisition and handling on PC with Windows10			1	10539	\$298.00	0%	\$298.00
Module with 4channel 4-20mA analog output and 2 alarm relays (NO contacts "fail safe")			1	65179	\$439.00	0%	\$439.00
Note: recommended is using one module for each sampling point							
I/O Module with 4channel 4-20mA analog output and 2 alarm relays (fail-safe NO contacts)			1	65430	\$590.00	0%	\$590.00
incl. external control via 4x contacts and 4channel analog input 4-20mA							
RS485 to Profi-NET converter (2 or 3 connecting cable is users scope)			1	14122	\$2,362.00	0%	\$2,362.00

SWG 100 BIOGAS

SAMPLING LINES	QTY	Part No.	Unit price	Discount	Total Price
Teflon (PTFE) gas sampling line - 0.16"/0.24" 3.28' (DN4/6mm, 1m length) (MAX 200 meters)	1	50624-01	\$11.00	0%	\$11.00

SAFETY OPTIONS	QTY	Part No.	Unit price	Discount	Total Price
Cabinet NEMA 4x - Stainless Steel - UL&CSA approved- Class 1 Div 2 - Z-Purge System NOTE: Air Compressor (999-COMP) is needed, when no compressed air is available on-site! NOTE: Gas detector (65435) is mandatory and must be added!	1	10136	\$14,895.00		\$14,895.00
Air compressor (6gal) from Craftsman for up to 10 bar pressure Including 100 foot of Air compressor line	1	999-COMP	\$350.00	0%	\$350.00
Additional safety precautions to increase the safety level in use NOTE: included #65435, LEL gas detector with system alarm in case of inside cabinet leakage	1	65971	\$2,099.00	0%	\$2,099.00
Gas detector (%LEL CH4) to monitor air inside analyzer cabinet	1	65435	\$755.00	0%	\$755.00
Calibration adapter for test and calibrate the gas detector 65435	1	12397	\$35.00	0%	\$35.00
Flame arrestor with 1/4"ID thread, to be mounted directly on biogas pipe at the sampling point or at sample gas inlet (client scope)	1	65427	\$827.00	0%	\$827.00

CONSUMABLES	QTY	Part No.	Unit price	Discount	Total Price
Consumable parts set for one year operation - for analyzer 951002 Note: set of particulate filter, activated carbon filter, purafil filter, replaceable hose set for condensate pump	1	65426	\$546.00	0%	\$546.00
Consumable parts set for one year operation - for analyzer 951030 Note: set of particulate filter, activated carbon filter, purafil filter, replaceable hose set for condensate pump	1	65426BM	\$546.00	0%	\$546.00



Aluminum Frame awning

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.