



## KM9106/P Quintox Industrial Combustion System Analyzer

The KM9106/P Quintox analyzer measures emissions and efficiency from any industrial, commercial, or residential combustion appliance. The Quintox can easily be configured for use on internal combustion sources, providing you the complete information required by your air regulatory authority. The unit can be upgraded to house four additional toxic gas sensors to meet future emissions requirements, making it the most versatile, rugged, portable combustion analyzer available today.

**Included in  
this Data Sheet**

**KM9106/P, KM940,  
KM900PLUS**

### KM940 Industrial Analyzer



### KM900PLUS Industrial Analyzer



## QUINTOX KM9106/P Industrial Combustion System Analyzer

### Functions

### Features

### Includes

### Specifications



#### Measures

- Oxygen (O<sub>2</sub>) 0 ~ 25%
- Carbon monoxide (CO) 0 ~ 10,000 ppm (H<sub>2</sub> Compensated and NOX filtered)
- Inlet temperature
- Flue temperature 32 ~ 2140°F (Optional high temperature probe shaft for flue temperatures exceeding 1112°F)

#### Calculates

- Combustion efficiency, carbon dioxide (CO<sub>2</sub>), net stack temperature, flue losses, excess air, CO/CO<sub>2</sub> ratio, and poison index

- Expandable capabilities, add up to five toxic gas sensors
- 1926 Memory locations for test results (auto or manual recording)
- Integrated plain paper printer
- Remote operation using 15' flue probe hose and 15' handset cable
- Remote handset cables available in 30' and 60' lengths
- Long-life 12V sealed gel cell battery with AC charger
- Easy access particle filter, chemical filter, and O<sub>2</sub> sensor for customer convenience

- CO Sensor ..... (KMCO1/Q)
- O<sub>2</sub> Sensor ..... (OS11)
- Flue probe assembly ..... (KMCSPP6)
- AC adapter ..... (KMCU110)
- Filter bypass ..... (FB1)
- Replacement particle filter ..... (16345)
- Chemical filter ..... (SF1)
- Water trap ..... (WTS9106)
- Water trap filter ..... (WNB8)
- Instruction manual

### KM9106/P

Function	Resolution	Accuracy	Range
Temperature	0.1°F/C	±1°F/C, ±0.3% of rdg	32° ~ 2140°F (0° ~ 1171°C)
<b>Gas Measurement</b>			
Oxygen	0.1%	-0.1%/+0.2%	0 - 25%
Carbon Monoxide Hydrogen Compensated	1 ppm	±20 ppm <400 ppm ±5% of rdg <2000 ppm ±10% of rdg >2000 ppm	0 - 10,000 ppm
Carbon Dioxide Calculated	0.1%	±0.30%	0 ~ fuel value
Nitric Oxide Nitrogen Dioxide Sulphur Dioxide	1 ppm	±5 ppm <100 ppm ±5% of rdg >100 ppm	Listed in optional section
Hydrocarbons	0.01%	<1%: ±0.05% >1%: ±5% of reading	
Pressure (draft)	0.01 mbar/in WG	±0.05% full scale	

#### KM9106 Optional Sensors

<b>KMNO1/Q</b>	Nitric Oxide sensor	0 ~ 5,000 ppm
<b>KMNO2/Q</b>	Nitrogen Dioxide sensor	0 ~ 1,000 ppm
<b>KMSO2/Q</b>	Sulphur Dioxide sensor	0 ~ 5,000 ppm
<b>KMHC104/Q</b>	Hydrocarbon sensor	0 ~ 5% LEL
<b>KM6CO1/Q</b>	High CO	0 ~ 10%
<b>KMPS2/Q</b>	Pressure sensor (draft)	0 ~ 150 mbar
<b>Dimensions</b>	17.75" long x 9" wide x 13.75" high	
<b>Weight</b>	21 lbs.	

# INDUSTRIAL COMBUSTION ANALYZERS

## KM940 Industrial Combustion Analyzer



### Measures

- Oxygen (O<sub>2</sub>) 0 ~ 20.9%
- Carbon monoxide (CO) 0 ~ 10,000 ppm (H<sub>2</sub> Compensated and NOX filtered)  
Flue temperature 32 ~ 1112°F
- Pressure to ± 150mBar

### Calculates

- Combustion efficiency, carbon dioxide (CO<sub>2</sub>), net stack temperature, flue losses, excess air, CO/CO<sub>2</sub> ratio, poison index

- **High suction double-headed pump**
- **Teflon lined flue probe tube**
- Expandable capability, add up to two additional toxic gas sensors
- 150 Memory locations for test results
- Infrared printer port
- Large 4-line display
- Long-life 6V sealed gel cell with AC charger

- Teflon lined flue probe assembly ... (SM12527)
- AC adapter ..... (KMCU900/110)
- Replacement particle filter ..... (16345)
- Water trap assembly..... (WT900/2)
- Large cordura case
- Instruction manual

## KM940 & KM900PLUS BASE SPECIFICATIONS

Measures			
Function	Resolution	Accuracy	Range
Flue Temperature w/ Probe	1.0°F/C	±2.0°F/C, ±0.3% of rdg	32° ~ 1112°F (0° ~ 600°C)
Inlet (Ambient) Temperature	1.0°F/C	±1.0°F/C, ±0.3% of rdg	32° ~ 122°F (0° ~ 50°C)
Pressure	0.1 mbar	±2% of full scale	+150 mbar ~ -150 mbar
Gas Measurements*			
Oxygen	0.1%	±0.2%	0 ~ 21%
Carbon Monoxide (standard: H compensated)	1 ppm	±20 ppm <400 ppm ±5% >5000 ppm ±10% <5000 ppm	0 ~ 10,000 ppm

Calculations			
Function	Resolution	Accuracy	Range
Carbon Dioxide	0.1%	±0.3% reading	0 ~ 99.9%
Losses	0.1%	±1.0% reading	0 ~ 99.9%
Efficiency	0.1%	±1.0% reading	0 ~ 99.9%
Excess Air	0.1%	±0.2%	0 ~ 2885.0%
Temp (Nett)	1.0°C/F	±2°C ±0.3% reading	32 ~ 1112°F (0 ~ 600°C)
CO/CO <sub>2</sub> Ratio	0.0001	±0.0001	0 ~ 0.9999
Poison Index	0.01%	±0.01	0 ~ 99.99

General		Probe Dimensions	
Preprogrammed Fuels	Natural Gas, Town Gas, Gascor, Light Oil, Heavy Oil, Propane Butane, Anthrocite, Coke, Coal, Kinsale Gas	Ambient Operating Range	0°C to 45°C/10% to 90% RH non condensing
Weight	1 kg	Power Supply	Input: 110V AC / 220V AC nominal (Battery charger) Output: 12V AC off load Battery life >6 hours
Handset Dimensions	220 x 55 x 120 mm		

\* Toxic gas sensors need to be specified at time of purchase or may be added at a later time.

# INDUSTRIAL COMBUSTION ANALYZERS

## KM900PLUS Industrial Combustion Analyzer



### Measures

- Oxygen (O<sub>2</sub>) 0 ~ 20.9%
- Carbon Monoxide (CO) 0 ~ 10,000 ppm (H<sub>2</sub> Compensated and NOX Filtered)  
Flue Temperature 32 ~ 1112°F

### Calculates

- Combustion efficiency, carbon dioxide (CO<sub>2</sub>), net stack temperature, flue losses, excess air, CO/CO<sub>2</sub> ratio, poison index

- Expandable capability, add up to two additional toxic gas sensors
- 150 Memory locations for test results
- Infrared printer port
- Large 4-line display
- Long-life 6V sealed gel cell with AC charger

- Flue probe assembly .....(KMCP10)
- AC adapter .....(KMCU900/110)
- Replacement particle filter .....(16345)
- Water trap assembly.....(WT900/2)
- Large cordura case
- Instruction manual

## KM9 SERIES VARIATIONS

PART #	Base Model	Sensor Configuration				Notes
KM940CON	KM940	O2	CO	N01		Calculated NOX
KM940COS	KM940	O2	CO	S02		
KM940CONOX	KM940	O2	CO	N01	N02	True NOX
KM940CONS	KM940	O2	CO	N01	S02	Calculated NOX + SO2
KM940CO%	KM940	O2	CO (Hi Range)			
KM900CON	KM900PLUS	O2	CO	N01		Calculated NOX
KM900COS	KM900PLUS	O2	CO	S02		
KM900CONOX	KM900PLUS	O2	CO	N01	N02	True NOX
KM900CONS	KM900PLUS	O2	CO	N01	S02	Calculated NOX + SO2
Gas Measurement	Resolution	Accuracy			Range	
Carbon Monoxide high range (CO%)	0.01%	±5% reading from 0.1% to 10%			0 ~ 10%	
Nitric Oxide (NO1)	1 ppm	±5 ppm <100 ppm ±5% >100 ppm			0 ~ 5000 ppm	
Nitric Oxide (NO1) low range	1 ppm	±2 ppm <30 ppm ±5 ppm <30 ppm			0 ~ 100 ppm	
Nitrogen Dioxide (NO2)	1 ppm	±5 ppm <100 ppm ±10 ppm <500 ppm ±5% >500 ppm			0 ~ 1000 ppm	
Sulfur Dioxide (SO2)	1 ppm	±5 ppm <100 ppm ±5% >100 ppm			0 ~ 5000 ppm	



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# ACCESSORIES

## QUINTOX

### Accessories & Replacement Parts

#### Accessories/Options

High range CO sensor (0 to 10%).....	KM6CO1/Q
High range CO purge module .....	KM9106HPUR/Q
NO1 Sensor module <sup>1</sup> .....	KMNO1/Q
NO2 Sensor module <sup>1</sup> .....	KMNO2/Q
SO2 Sensor module <sup>1</sup> .....	KMSO2/Q
Hydrocarbon sensor/CO <sup>2</sup> sensor <sup>1</sup> .....	KMHC104/Q
Pressure sensor module .....	KMPS2/Q
15' Handset extension .....	RE5LG
30' Handset extension lead .....	RE10LG
60' Handset extension lead .....	RE20LG
Auto drain water trap .....	WTS9106P
Temperature inlet probe .....	ATT100
Sulfur filter .....	SF1

## KM9 SERIES

### Accessories & Replacement Parts

#### Accessories/Options

Thermal printer IR Link .....	KMIRP2
CO Sensor: 0 ~ 10,000 ppm .....	
H2 compensated <sup>1</sup> .....	12933
CO Sensor: (KM940 Only) .....	
High range 0 ~ 10% <sup>2</sup> .....	13911
NO Sensor: 0 ~ 5,000 ppm <sup>1</sup> .....	13251
NO Sensor: low range 0 ~ 100 ppm <sup>1</sup> .....	18079
Pressure sensor module .....	KMPS4
NO2 Sensor: 0 ~ 1,000 ppm <sup>1</sup> .....	10533
SO2 Sensor: 0 ~ 5,000 ppm <sup>1,2</sup> .....	13910
SO2 Sensor: low range 0 ~ 100 ppm) <sup>1</sup> .....	18131

<sup>1</sup> KM940 and KM900PLUS sensors are factory replacement and calibration only and are not eligible for user or in-field service.

<sup>2</sup> Special Order ONLY

#### Replacement Parts/Supplies

Flue probe assembly .....	KMCSP6
Probe shaft 12" 1000° .....	10051
Probe shaft 36" 1000° .....	15588
Probe shaft 36" 2000° .....	15590
Printer paper and ribbons (10 rolls and 5 ribbons) .....	DP12
Smoke paper and chart .....	SP9
Particle filter with housing .....	KMAF2
Particle filter .....	16345
Replacement battery .....	7211
110V AC Adapter / charger .....	KMCU110
AC Adapter power cord .....	PSL/US
250V AC Adapter / charger .....	KMCU220
Replacement water trap .....	WTS9106
Water trap filter (for WTS9106) .....	WN8
Water trap filter(for metal base) .....	WN9
Chemical (Sulfur) filter .....	SF1
Chemical filter bypass .....	FB1
Oxygen sensor .....	OS11

#### KM9 Series Replacement Parts/Supplies

Flue probe.....	KMCP10
Teflon Lined Flue Probe (KM940) .....	SM12527
Thermal paper for KMIRP2.....	16646
Smoke pump.....	SPT1
Smoke paper and chart.....	SP9
Particle filter.....	16345
Battery.....	16486
AC Adapter/charger.....	KMCU900/110
Water trap (case mount).....	WT900/2
O2 Sensor.....	OS12
Pressure sensor (differential) <sup>1</sup> .....	KMPS4

## CAN'T FIND WHAT YOU'RE LOOKING FOR?...

UEi offers a full line of HVAC/R and Combustion Testing equipment. We have grouped our products specifically to make it easy to find what you're looking for. Here are a few related products and data sheets. For a complete list visit: [www.ueitest.com](http://www.ueitest.com)

Product Part # or Group	LIT #
A/C & Refrigeration .....	L351
Digital Clamp Meters .....	L333
Digital Multimeters .....	L332
Digital Temperature Testers .....	L352
Humidity & Air Flow Products.....	L353
Electrical Testing Equipment.....	L342



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## RELATED PRODUCT

### Combustion Meters



**C20**  
*CO & CO<sup>2</sup>*  
*Set-Up Meter*



**C20KIT**  
*Set-Up Meter Kit*



**Smart Bell**  
*CO<sup>2</sup> & Efficiency*  
*Combustion Meter*



**Smart Bell Plus**  
*CO & CO<sup>2</sup> & Efficiency*  
*Combustion Meter*

### Combustion Analyzers



**C75**  
*Eagle Combustion*  
*Analyzer*



**C125KIT**  
*Eagle Combustion*  
*Analyzer Kit*



**C155**  
*Eagle X Xtended Life*  
*Combustion Analyzer*



**C157KIT**  
*Eagle X Xtended Life*  
*Combustion Analyzer*  
*Kit w/ NO1*

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