



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 emission 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



Measures

- Oxygen (O₂) 0 ~ 25%
- Carbon monoxide (CO) 0 ~ 10,000 ppm (H₂ 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 (CO₂), net stack temperature, flue losses, excess air, CO/CO₂ 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 O₂ sensor for customer convenience
- CO Sensor (KMC01/Q)
- O₂ Sensor (OS11)
- Flue probe assembly (KMCSF6)
- AC adapter (KMCU110)
- Filter bypass (FB1)
- Replacement particle filter (16345)
- Chemical filter (SF1)
- Water trap (WTS9106)
- Water trap filter (WN8)
- Instruction manual

Specifications

KM9106/P

Function	Resolution	Accuracy	Range
Temperature	0.1°F/C	±1°F/C, ±0.3% of rdg	32° ~ 2140°F (0° ~ 1171°C)
Gas Measurement			
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		
KMN01/Q	Nitric Oxide sensor	0 ~ 5,000 ppm
KMN02/Q	Nitrogen Dioxide sensor	0 ~ 1,000 ppm
KMS02/Q	Sulphur Dioxide sensor	0 ~ 5,000 ppm
KMHC104/Q	Hydrocarbon sensor	0 ~ 5% LEL
KM6C01/Q	High CO	0 ~ 10%
KMPS2/Q	Pressure sensor (draft)	0 ~ 150 mbar
Dimensions	17.75" long x 9" wide x 13.75" high	
Weight	21 lbs.	

INDUSTRIAL COMBUSTION ANALYZERS

KM940 Industrial Combustion Analyzer



Measures

- Oxygen (O₂) 0 ~ 20.9%
- Carbon monoxide (CO) 0 ~ 10,000 ppm (H₂ Compensated and NOX filtered)
- Flue temperature 32 ~ 1112°F
- Pressure to ± 150mBar

Calculates

- Combustion efficiency, carbon dioxide (CO₂), net stack temperature, flue losses, excess air, CO/CO₂ ratio, poison index

- **High suction double-headed pump**
- **Fluoroplastic 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

- Fluoroplastic 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 ₂ Ratio	0.0001	±0.0001	0 ~ 0.9999
Poison Index	0.01%	±0.01	0 ~ 99.99

General			
Preprogrammed Fuels	Natural Gas, Town Gas, Gascor, Light Oil, Heavy Oil, Propane Butane, Anthrocite, Coke, Coal, Kinsale Gas	Probe Dimensions	(L) 420 x (Dia) 8mm with stainless steel shaft, K-type thermocouple and 3m hose (Fluoroplastic Lined w/KM940)
Weight	1 kg	Ambient Operating Range	0°C to 45°C/10% to 90% RH non condensing
Handset Dimensions	220 x 55 x 120 mm	Power Supply	Input: 110V AC / 220V AC nominal (Battery charger) Output: 12V AC off load Battery life >6 hours

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

KM900PLUS Industrial Combustion Analyzer



Measures

- Oxygen (O₂) 0 ~ 20.9%
- Carbon Monoxide (CO) 0 ~ 10,000 ppm (H₂ Compensated and NOX Filtered)
- Flue Temperature 32 ~ 1112°F

Calculates

- Combustion efficiency, carbon dioxide (CO₂), net stack temperature, flue losses, excess air, CO/CO₂ 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	

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 ¹	KMNO1/Q
NO2 Sensor module ¹	KMNO2/Q
SO2 Sensor module ¹	KMSO2/Q
Hydrocarbon sensor/CO ² sensor ¹	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 ¹	12933
CO Sensor: (KM940 Only)	
High range 0 ~ 10% ²	13911
NO Sensor: 0 ~ 5,000 ppm ¹	13251
NO Sensor: low range 0 ~ 100 ppm ¹	18079
Pressure sensor module	KMPS4
NO2 Sensor: 0 ~ 1,000 ppm ¹	10533
SO2 Sensor: 0 ~ 5,000 ppm ^{1,2}	13910
SO2 Sensor: low range 0 ~ 100 ppm ¹	18131

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

² 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
Fluoroplastic 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) ¹	KMPS4

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Combustion Analyzer
Kit w/ NO1

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