

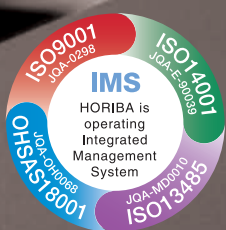
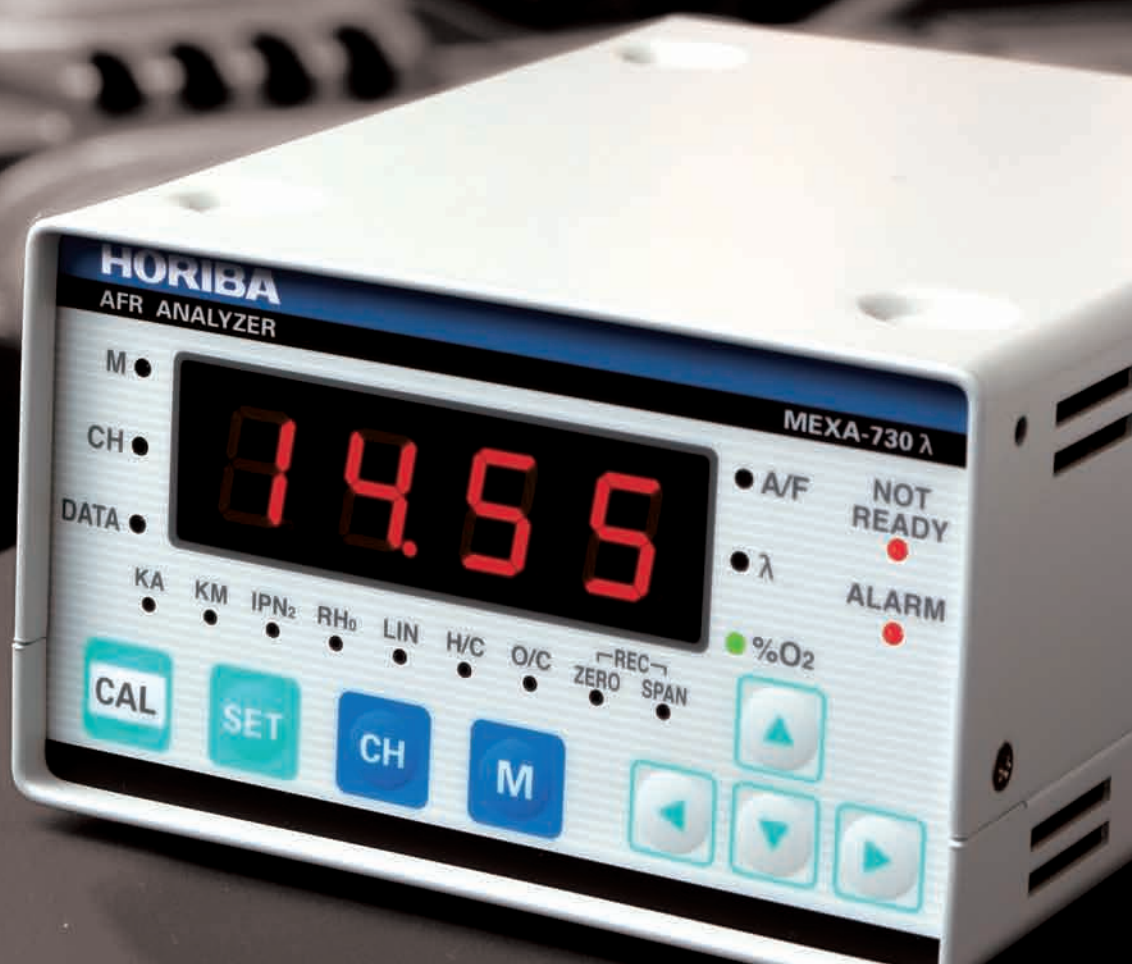
# HORIBA

Explore the future

## AIR-TO-FUEL RATIO ANALYZER

MEXA-730 $\lambda$

NEW



# Aim to be the benchmark for UEGO-based air-to-fuel analysis

## MEXA-730λ

Conforms to the RoHS Directive

### Original front panel providing enhanced visibility and operation Restorable sensor coefficient data with new memory back-up function.

Previously MEXA-700λII used know-how and ingenuity gathered from HORIBA air-to-fuel ratio measurement technologies used worldwide, to provide the highest level of performance. The MEXA-730λ adopts this performance and adds original design for enhanced visibility and operation.

A new sensor coefficient data memory function makes it possible to restore back-up data, providing faster start-up times and saving valuable operation time.

This enhanced device will meet your multiple testing requirements covering applications from, lab analysis of air-to-fuel ratio, excess air ratio and oxygen concentration, to on-board real time measurement.



#### Typical display screens Easy-to-see display with improved black background



## Applications

- Engine research and development
- Engine tuning
- Catalyst development
- Exhaust gas adjustment
- On-board evaluation
- ECU adjustment



## Meets your need to measure air-to-fuel ratio under various applications

### Provides stability with air-to-fuel analyzing sensor

To meet the stringent measurement conditions of research and development, the on-board auto sensor is produced specifically for air-to-fuel evaluation. Each unit undergoes thorough inspection to guarantee accuracy. As a standard unit for air-to-fuel ratio measurement, the MEXA-730λ provides reliable accurate performance. Sensors of MEXA-700λ/700λII can be used with MEXA-730λ.



▲100% inspection of sensor guarantees accuracy

### Wide measurement range applicable to lean-burn engine development

The MEXA-730λ can handle various applications with its wide measurement range. Use it in the front line of development for sure evaluation of any type of engine you are working on, including lean-burn.

### Versatility inherited from MEXA-700λ

The MEXA-730λ can be mounted on vehicle dashboards, table-tops, or in a 19-inch rack cabinet. It is easily transported from location to location providing the versatile characteristics required for your testing requirements.



### Can be stacked for multi-channel measurement

Multi-channel measurements are easily accommodated by using several MEXA-730λ units simultaneously, for example, to monitor air-to-fuel ratio in each cylinder. The stable and compact design of the MEXA-730λ permits the instruments to be safely stacked for maximum convenience.



### Small DC drive allows on-board mounting for convenient operation from the dashboard or complementary locations.



**Specifications**

**Control unit**

Model name MEXA-730λ  
 Display range A/F : 3.99 to 500.0  
 λ : 0.275 to 30.00  
 O<sub>2</sub> : 0.00 to 99.99 vol%

Accuracy of A/F (Guarantee range is from 9.5 to 200 A/F)

(Model gas at room temperature, atmospheric pressure is used):

With 3-point calibration at 9.5 A/F, stoichiometric point and 60.0 A/F  
 9.50 A/F to stoichiometric point: within ±0.3 A/F  
 at stoichiometric point: within ±0.1 A/F  
 stoichiometric point to 20.00 A/F: within ±0.3 A/F  
 20.01 to 30.00 A/F: within ±0.7 A/F  
 30.01 to 40.00 A/F: within ±1.0 A/F  
 40.01 to 50.00 A/F: within ±1.5 A/F  
 50.01 to 60.00 A/F: within ±2.0 A/F  
 60.01 to 80.00 A/F: within ±6.0 A/F  
 80.01 to 100.0 A/F: within ±9.0 A/F  
 100.1 to 150.0 A/F: within ±20.0 A/F  
 150.1 to 200.0 A/F: within ±38.0 A/F

Response time Typically 0.08 s (Max. 0.15 s)

Digital input-output RS-232C (standard)

Analog output 0 to 5 V DC (scaling possible)

H/C setting range 0.00 to 9.99 (key selectable)

O/C setting range 0.000 to 6.811 (key selectable)

Calibration gas Ambient air or standard gas

Acceptable vibration 0 to 294 m/s<sup>2</sup>

Power 10-30 V DC, 50 W

Dimensions 130 (W) × 170 (D) × 75 (H) mm

Mass Approx. 1.1 kg (Control unit)

**UEGO Sensor** (Data sheet supplied with each UEGO sensor)

Sample gas temperature -7°C to 900°C

Heater temperature control PID

Hexagonal nut size 22 mm

Torque 40±4N·m

**Standard accessories**

UEGO sensor (1), Sensor cable 10 m (1), DC power cable (1),

Analog output cable (1)

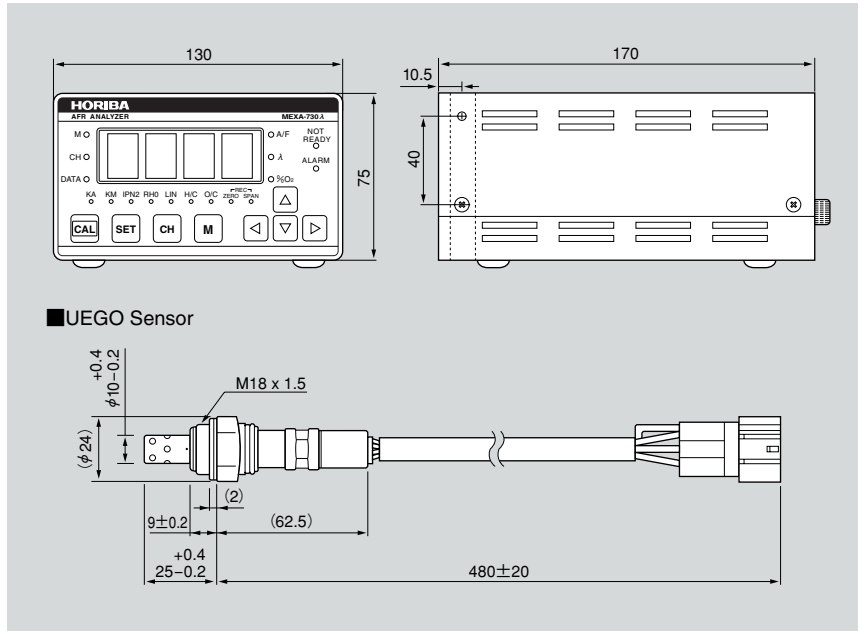
**Options**

AC power unit (Not conform to CE marking),

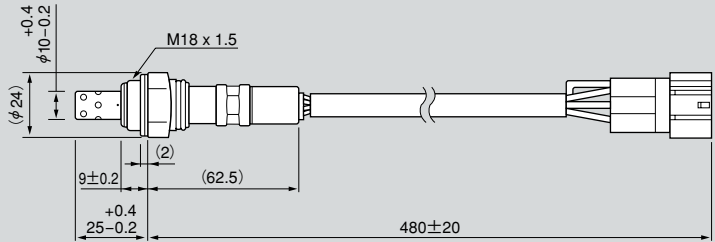
Sensor cable (5 m, 20 m), Calibration unit,

Attachment nut, Closing-up bolt, RS-232C cable

**Dimensional outlines (units: mm)**



**UEGO Sensor**



**[Option]**

Calibration unit (Bubbler)

*HORIBA continues contributing to the preservation of the global environment through analysis and measuring technology.*



**⚠ Please read the operation manual before using this product to assure safe and proper handling of the product.**

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