





About 25 years have passed since Fuji Electric first marketed a CO/HC automobile exhaust gas analyzer. The high-level technology incorporated in these instruments has been highly evaluated by users nationwide. A new analyzer has now been developed in answer to demands for an even better instrument. This new analyzer is easier to handle by using user friendly human-machine interface.

It can measure 6 parameters (CO, HC, CO<sub>2</sub>, O<sub>2</sub>, A/F and  $\lambda$ ). CO, HC and CO<sub>2</sub> are measured by solid-state NDIR sensor. O<sub>2</sub> is measured by Galvanic sensor. This instrument completely fulfills the various requirements of an analyzer and is expected to fully satisfy users' expectations.

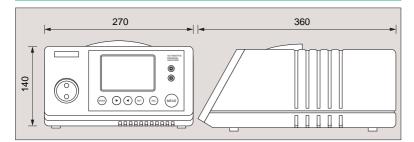
#### **Features**

- 4 components (CO, HC, CO<sub>2</sub> and O<sub>2</sub>) can be measured and calculated A/F (Air/Fuel ratio) or λ (excess air ratio)
- A large LCD display with fluorescent back light displays
   4 components, A/F and λ.
- A small size and high reliable solid-state NDIR sensor for CO, HC and CO<sub>2</sub> and Galvanic O<sub>2</sub> sensor provides a high level of accuracy, avoides the influence of vibration and shock.
- Display of sampling abnormality like as incorrect insertion of the probe and sampling line or membrane filter clogging.
- Compact design and lightweight (approx. 5kg).

### **Specification**

| TYPE                               | ZKE   |
|------------------------------------|---|
| Measurable components              | CO+HC+CO <sub>2</sub> +(O <sub>2</sub> ) ( ) ; Option             |
| Measuring principle                | CO, CO <sub>2</sub> , HC; NDIR                                    |
|                                    | O <sub>2</sub> ; Galvanic Cell                                    |
| Measuring range                    | CO, 0.00~10.00vol%  |
|                                    | HC; 0~10000ppm or 0~14000ppm                                      |
|                                    | CO <sub>2</sub> ; 0.00~20.00vol%                                  |
|                                    | O <sub>2</sub> ; 0.00~25.00vol% (Option)                          |
|                                    | A/F ; 10.0~30.0   |
|                                    | λ; 0.50~2.50  |
| Display (minimum indication)       | LCD display 4 digits and 5 digits                                 |
|                                    | CO (0.01vol%)   |
|                                    | HC (1ppm)   |
|                                    | CO <sub>2</sub> (0.01vol%)  |
|                                    | O <sub>2</sub> (0.01vol%)   |
|                                    | A/F (0.1)   |
|                                    | λ (0.01)  |
| Repeatability                      | CO; ±0.06vol% or ±5% of reading whichever is greater              |
|                                    | HC; ±12ppm or ±5% of reading whichever is greater                 |
|                                    | CO <sub>2</sub> ; ±0.5vol% or ±5% of reading whichever is greater |
|                                    | O <sub>2</sub> ; ±0.5vol% or ±5% of reading whichever is greater  |
| Response time                      | 90% response less than 15sec (CO, HC & CO <sub>2</sub> )          |
| NA/                                | less than 25sec (O <sub>2</sub> )                                 |
| Warm up time                       | Less than 5min.   |
| Output                             | RS232C  |
| Printer                            | Model BS-80tsd separately connected (separately ordered)          |
| Electrical calibration             | Auto calibration  |
| Self diagnosis                     | Warming up time   |
|                                    | Improper insertion  |
| Dawarawah                          | Clogging of filters and/or sampling line                          |
| Power supply                       | AC90~264V 50/60Hz   |
| Ambient temperature                | 0~40°C<br>Less than 90%RH   |
| Ambient humidity                   |   |
| Mass Outling dimension (H x W x D) | Approx. 5kg   |
| Outline dimension (H x W x D)      | 145 x 270 x 360mm   |

## Outline [ Unit : mm ]



## Ordering code for consumables

| Name   | Code        | Remarks                                  |
|--|-------------|--|
| Primary filter element                         | ZBNH3012    | 20pcs/1box                               |
| Membrane filter element                        | ZBNC6102    | 100pcs/1box                              |
| Packing for primary filter and drain separator | ZBNN2012    | 10pcs/1pack                              |
| O-rings for membrane filter                    | ZBNN3012    | 10pairs/1pack                            |
| Tube type fuse                                 | ZBNM2012    | 10pcs/1pack 1A                           |
| Standard gas                                   | ZBM4NVQ4-00 | CO, CO <sub>2</sub> , HC, N <sub>2</sub> |

# Symbol code

|     |   | _ | _ | _ | _ | -  |
|-----|---|---|---|---|---|--|
| ZKE | 2 |   |   | 1 | 1 |  |
|     |   |   |   |   |   | Letters  |
|     | 2 |   |   |   |   | Display:English  |
|     |   |   |   |   |   | Measurable components  |
|     |   | 3 |   |   |   | CO/HC/CO <sub>2</sub> measurement,<br>A/F, λ indication                  |
|     |   | 4 |   |   |   | CO/HC/CO <sub>2</sub> /O <sub>2</sub> measurement,<br>A/F, λ indication  |
|     |   |   |   |   |   | Measuring range  |
|     |   |   | 1 |   |   | CO:0~10% HC:0~10000ppm,<br>CO <sub>2</sub> :0~20%                        |
|     |   |   | 2 |   |   | CO:0~10% HC:0~10000ppm,<br>CO <sub>2</sub> :0~20%, O <sub>2</sub> :0~25% |
|     |   |   | 3 |   |   | CO:0~10% HC:0~14000ppm,<br>CO <sub>2</sub> :0~20%                        |
|     |   |   | 4 |   |   | CO:0~10% HC:0~14000ppm,<br>CO <sub>2</sub> :0~20%, O <sub>2</sub> :0~25% |

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