Portable oxygen analyzer TB-ZI series

Feature

- *Wide range application*
- *Weight saving from previous model TB-ZI:4.3kg/TB-WI series:6.0kg*
- *Stable measuring by smooth temperature control system*
- *Built-in multi filter protects detector from corrosive gas*
- *High quality, high Certainty*

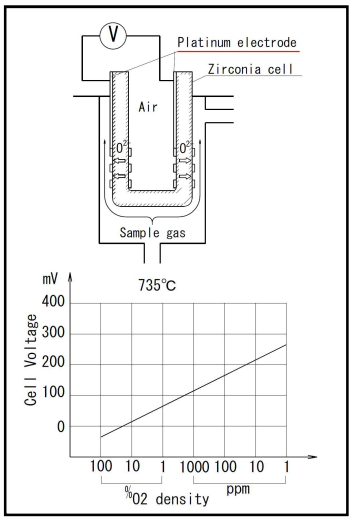
Application

- *Portable application*
- *Semiconductor application*
- *Reflow furnace*
- *Exhaust gas etc.*

TB-ZI Series

This model is a portable analyzer which uses Detective element made of Zirconia electrolyte.
TB sensor and C－301 control unit are installed altogether in a box for portable uses.

Principle



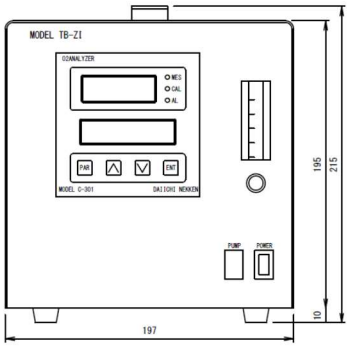
Sensing cell is a closed end, 90mm length and 7mm diameter. Tube made of Zirconium oxide. When it is red hot, it becomes an oxygen measuring cell because of movement of oxygen ions in its crystal structure.
If there are two different oxygen gases on both side of the cell, a voltage is produced.
For the oxygen in combustible gases, the oxygen value is calculated from following formula:

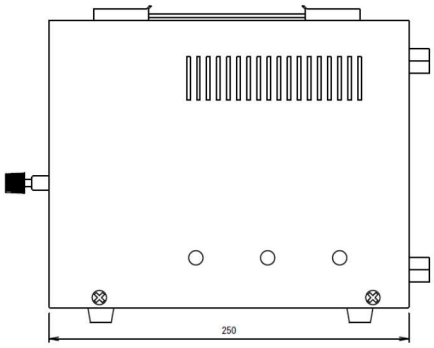
$$E = 0.0496 \cdot T \log \frac{\text{Air (20.6\%=206,000ppm=0.206atm)}}{\text{Sample}=O^2\%, O^2\text{ppm}, O^2\text{atm}} + C$$

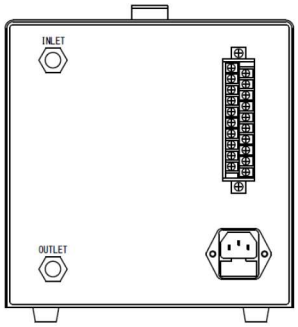
E: cell voltage(mV) T: absolute cell temperature
C: cell constant(mV) O^2atm: vol% of oxygen of

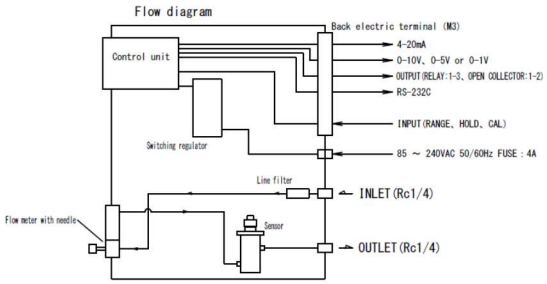
※About 2 years warranty •It is limited our original instrument only. •Consumption parts such as filter, O-ring are except
•In case of the sampling gas contains strong acidity, strong alkaline, or corrosiveness, it may be out of warranty.

Dimensions

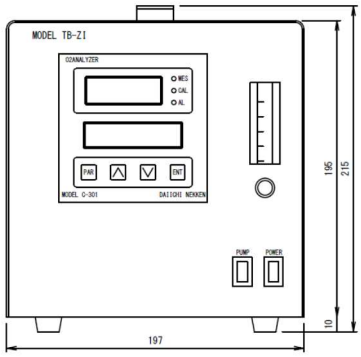


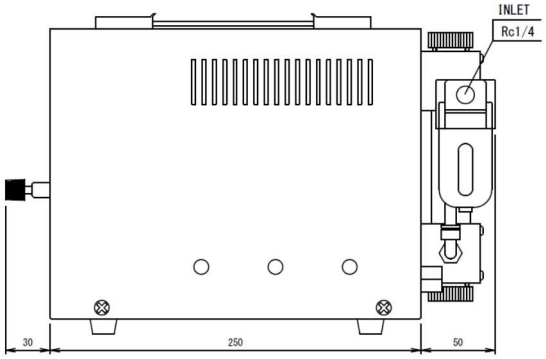


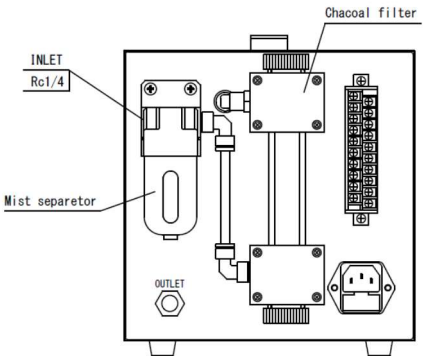


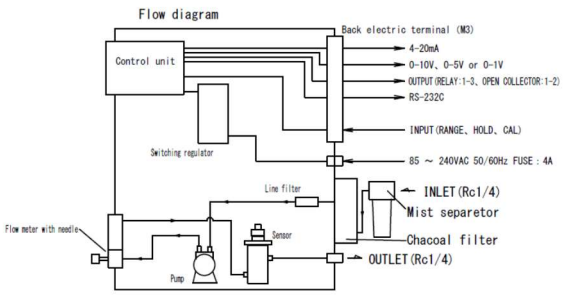


TB-ZI-PR Dimensions









TB-ZI Series

Specification

Model	TB-ZI series	
	TB-ZI	
	TB-ZI-P	With sampling pump
	TB-ZI-PR	With sampling pump, Charcoal filter, Mist separator
Principle	Zirconia electrolyte	
Structure	SPCC box、TB sensor、C-301 Control unit、Flow meter with needle	
Measuring range	1ppm～100%O_2	
Display	% ：0～99.99%O_2／ppm：0～9999ppmO_2	
Output	4～20mADC（Isolated） 0～1VDC、0～5VDC、0～10VDC（Isolated、select one of them） RS-232C Relay：3pcs(Contact A)、Open collector：2cs(Possible to set below freely) （Concentration alarm：Hi／Lo、HHi／Hi or Lo／LLo（OLED display） Sensor failure：Heater、RTD broken（OLED display） Warm-up finish signal Range answer back）	
Contact input	Remote calibration Output(Voltage/Current) holding Remote range change	
Range change	Auto／Manual／Remote	
Default setting	0～25.00%O_2／0～9999ppmO_2	
Gas supply	TB-ZI：Supply with pressure　TB-ZI-P, TB-ZI-PR：Sucking by pump	
Pressure	Till 2atm	
Drift Linearity Repeatability Response Piping Flow rate Sample temp. Warm-up Power Accessory	Less than ±2%FS/week Large one either of less than ±1%FS or±1ppm Large one either of less than ±1%FS or±1ppm 90% reading 10sec.（Swinging to a high density side） Rc1/4 0.2～2L／min. 60℃ MAX. at Inlet About 20 min. 85～264VAC 3 meters of Power supply code	

※For the improvement, the specification and design may be changed without prior notice.

Inquiry

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