

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*

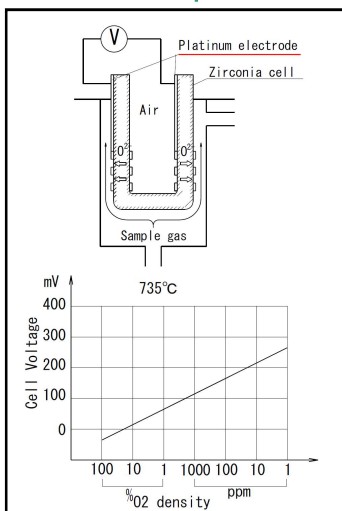
Application

- *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:

$$E = 0.0496 \cdot T \log \frac{\text{Air (20.6\% = 206,000ppm = 0.206atm)}}{\text{Sample = O}_2\%, \text{ O}_2\text{ppm, O}_2\text{atm}} + C$$

E: cell voltage(mV) T: absolute cell temperature
C: cell constant(mV) O₂atm: vol% of oxygen of

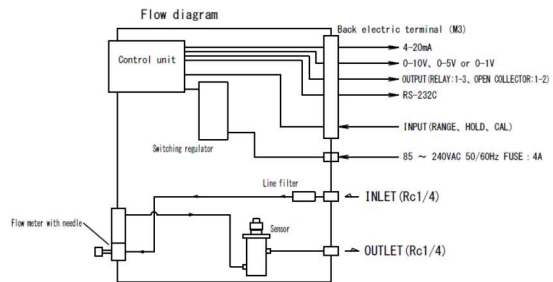
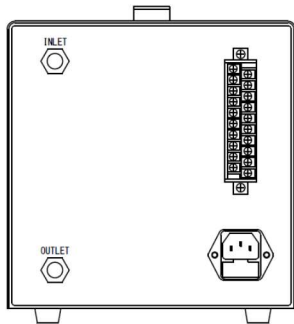
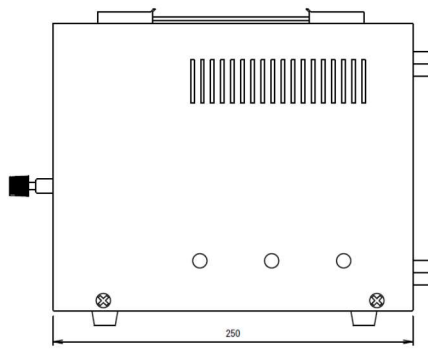
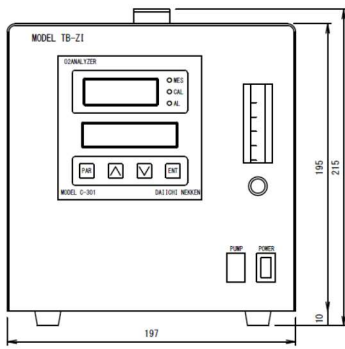
※About 2 years warranty

•It is limited our original instrument only.

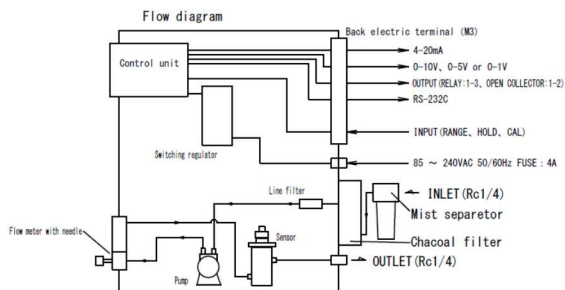
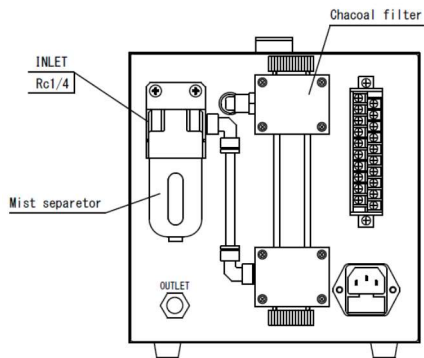
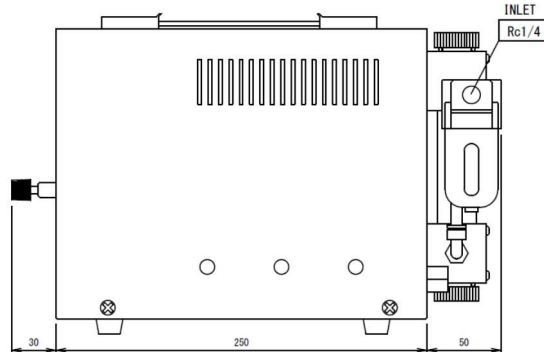
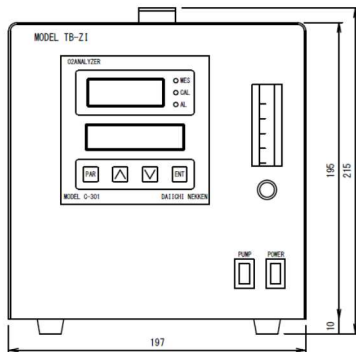
•Consumption parts such as filter, O-ring are except

•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

M o d e l	TB-ZI series	
	TB-ZI	
	TB-ZI-P	With sampling pump
	TB-ZI-PR	With sampling pump, Charcoal filter, Mist separator
P r i n c i p l e	Zirconia electrolyte	
S t r u c t u r e	SPCC box, TB sensor, C-301 Control unit, Flow meter with needle	
M e a s u r i n g r a n g e	1ppm~100%O ²	
D i s p l a y	% : 0~99.99%O ² / ppm : 0~9999ppmO ²	
O u t p u t	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	
C o n t a c t i n p u t	Remote calibration Output(Voltage/Current) holding Remote range change	
R a n g e c h a n g e	Auto/Manual/Remote	
D e f a u l t s e t t i n g	0~25.00%O ² / 0~9999ppmO ²	
G a s s u p p l y	TB-ZI : Supply with pressure TB-ZI-P, TB-ZI-PR : Sucking by pump	
P r e s s u r e	Till 2atm	
D r i f t	Less than ±2%FS/week	
L i n e a r i t y	Large one either of less than ±1%FS or±1ppm	
R e p e a t a b i l i t y	Large one either of less than ±1%FS or±1ppm	
R e s p o n s e	90% reading 10sec. (Swinging to a high density side)	
P i p i n g	Rc1/4	
F l o w r a t e	0.2~2L/min.	
S a m p l e t e m p.	60°C MAX. at Inlet	
W a r m - u p	About 20 min.	
P o w e r	85~264VAC	
A c c e s s o r y	3 meters of Power supply code	

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

Inquiry



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