

# PORTABLE CP ANALYZER



Fuji Portable CP Analyzer is used to measure CP (Carbon Potential) value of the inside furnace such as a Carbonized furnace or a Generation furnace. CP value is calculated by the following 3 parameters, the measuring value of CO<sub>2</sub>, supposed setting value or measuring input with K type TC temperature of the inside furnace and the supposed setting value CO concentration. A high level accuracy infrared system is adopted to measure CO<sub>2</sub> concentration. The purpose of this analyzer is to check the accuracy of a Zirconia Oxygen sensor, which is used to control CP value, related to ISO9000.

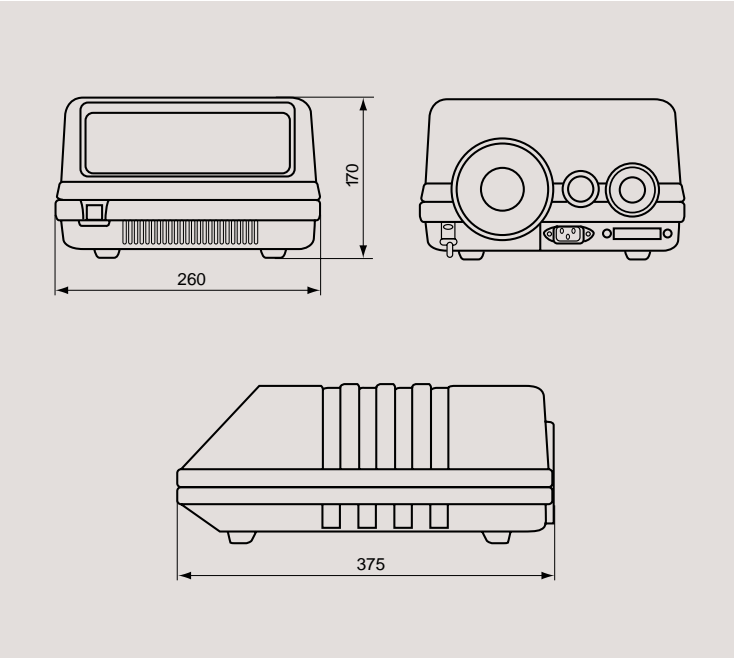
## Features

- Compact and light-weight.
- A high level accuracy infrared system is adopted to measure CO<sub>2</sub>.  
CP analyzer offers high traceability calibration by a traceability standard gas.
- Display adopts a large LED.
- The analyzer built-in sampling device such as a pump, a filter and a flow meter.

Specification

TIPE	ZFX1KA11
Measuring System	Calculate CP value which used on CO <sub>2</sub> (measuring value), temperature of inside furnace (Set up value or measuring value), CO(set up value only)
Measuring Component	CO <sub>2</sub> in Gas generator furnace or Carburizing furnace
Measuring Principle for CO <sub>2</sub>	Non-dispersion infrared(NDIR) absorption method
Measuring range for CO <sub>2</sub>	0-2 vol%
Value of Temperature	800-1000°C(K-thermocouple or set up value)
CO concentration	20-35%(each 0.1%)
Measuring range of CP value (CO 30%)	0.2CP ≥ (Temperature is 890°C) 0.5CP ≥ (Temperature is 820°C) 0.7CP ≥ (Temperature is 800°C)
Function <ul style="list-style-type: none"><li>CO<sub>2</sub> Repeatability</li><li>CO<sub>2</sub> Drift</li><li>CO<sub>2</sub> Linearity</li><li>Repeatability of temperature</li></ul>	±0.5% FS Both Zero and Span : ±2% FS/day Range 0-1% : ±1% FS, Other range : ±2% FS ±1°C
Response time	Within 30 seconds (for 90% response)
Flow rate of sample gas	Approx.1L/min(built-in pump, filter and flow meter)
Output singal	CP : 1-5VDC(0-2.0CP)(to change 4-20mA, put in resistance of 250Ω)
Display	· 4 digit LED for CP value or CO <sub>2</sub> value · Set-up value or measurement value of temperature
CO <sub>2</sub> Calibration	Standard gas(N <sub>2</sub> , CO <sub>2</sub> /N <sub>2</sub> )
Power supply	100,115V AC±10%, 50/60Hz, approx. 60VA
Sampling Gas conditions	CO <sub>2</sub> : 0-2%      CO : 20-35%      H <sub>2</sub> : 30-67%      H <sub>2</sub> : 30-67% Dew point : ≤ 20°C      Dust : 0-10mg/Nm <sup>3</sup>
Operation conditions	Ambient temperature : 10-40°C      Ambient humidity : ≤ 90%RH Installation condition : In door
External dimension (HxWxD)	170H x 260W x 375Dmm
Mass	Approx.5kg

Outline [Unit : mm]



Symbol code

Z	F	X	1				1
				K			CO <sub>2</sub> measuring range 0~2%
				A			CP output 1-5VDC
							Power supply
					1		AC100V 50/60Hz
					2		AC115V 50/60Hz

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