

- **Low cost and small size**
- **Dual NDIR sensor built-in**
- **For HVAC and food process control**
- **Good accuracy, sensitivity & selectivity**
- **Low humidity & temp. Dependence**
- **Duct mounting variant**
- **Local indicator (option)**
- **RS232 interface (option)**

DESCRIPTION

BPHG100 transmitter measures CO₂ concentration in in-door atmospheres and converts it into standard current or voltage signal. BPHG100 uses dual nondispersive infrared (NDIR) carbon-dioxide sensor providing improved accuracy and sensitivity as well as low temperature and humidity dependence. The transmitter can be equipped with local 4-digit LED display and RS232 serial interface. BPHG100 mounting variants include free or duct installation with top or bottom mounted connector. BPHG100 application area includes indoor air control, ventilation, air-conditioning, mushroom control, etc.

**SPECIFICATIONS GENERAL**

Construction : Field mount
Wiring : 4-pin M12 connector (2)
Housing material : ABS/PC plastic

INPUT

Built-in : Non-dispersive Infrared CO₂ cell
Measurement range : 0...3000/5000/10000 ppm

OUTPUT

Output signal : 0-10V, 0 (4)-20mA
Output update : 2s
Load : 350 Ω at 24VDC/20mA
Min load voltage : Min 1Mohm
Over scale limit : Max 35 mA ± 2 mA, 17V ± 2V
Interface type : RS232, 9600 bps
Function : CO₂ data transmission
Protocol : ASCII, free

DISPLAY

Digital display : 4 digit LED, 14 mm
Display resolution : 1 ppm
Display refresh : 1s
Accuracy : 0.2% from span

PERFORMANCE

Measurement error (1) : ± 2 ppm (0...3000 ppm) 10-50 °C
Temperature dependence : 10ppm for 1°C
Humidity dependence : 10ppm for 1% RH
Warm-up time : Max 90 s (at 25 °C)
Response time : Max 30 s (w/o sintered filter)

INSTALLATION

Supply : 15-32VDC
Consumption : Max. 90 mA (150 mA w/ indicator)
Ambient temp : 0 to 50°C
Humidity : 0-85% none condensing
Wiring : 4-pin M12 connector (2)
Dimension : W80 x H80 x D70mm
Sensor protection : Plastic cap with polyester filter
Sintered filter : Stainless steel, 75 μm
Mounting : Free (3) or Duct
Process connection : None Movable flange (4)
Gas inlet length : 30mm 130mm
Weight : 250g 350g
Protection class : IP65 (excluding gas inlet)
EMC : Complies with CE



- (1) Including non linearity error
 (2) Straight or angles female part included
 (3) Radial and axial mounting accessories can be ordered separately(see 'Accessories')
 (4) Small POM flange DN16.5.

ORDER INFORMATION**BCDT100**

CASE	RANGE	INTERFACE	OUTPUT
B Bottom	03 3000	X None	E 0-20mA
T Top (Free)	05 5000	A RS232	F 4-20mA
DB Bottom	10 10000		K 0-10V
DT Top (Duct)			Z Specify

CONNECTOR	SINTRED FILTER	INDICATOR
C1A Angled M12	X None	X None
C1S Straight M12	S Mounted	A Mounted