

# Ambient CO-/CO<sub>2</sub> measuring instrument

testo 315-3 - Parallel measurement of CO and CO<sub>2</sub> in ambient air according to European standard EN 50543

Parallel and direct CO-/CO<sub>2</sub> measurement

TÜV-tested according to EN 50543

Convenient, easy handling

Measurement values transferrable to the testo 330 (V2010)

Data printout on site













#### Precision - from the sensor to the housing

With a highly accurate electrochemical sensor for CO measurement and a shock-resistant infrared  $\mathrm{CO}_2$  sensor, the measuring instrument testo 315-3 is state-of-the-art technology. It is excellently equipped to resist external influences by its robust design and the optionally available TopSafe. And that's not all. During the measurement, optical and audible signals let you know immediately whether the variably adjustable limit values have been exceeded.

Thanks to the wireless data transfer via IrDA or Bluetooth, you can transfer your measurement data directly to the flue gas analyzer testo 330, or print them out. Your customers receive a special service: the results are presented directly on site. The Auto-off function and a Lithium polymer rechargeable battery ensure that the instrument, thanks to its long running time, can be used for long periods without using unnecessary power.



## Technical data

# testo 315-3 without Bluetooth

testo 315-3 ambient  ${\rm CO/CO_2}$  measuring instrument without Bluetooth incl. USB mains unit and cable

Part no. 0632 3153



#### testo 315-3 Bluetooth

testo 315-3  ${\rm CO/CO_2}$  measuring instrument with Bluetooth incl. USB mains unit and cable

Part no. 0632 3154

#### General technical data

Storage temp.	-20 to +60 °C / -4 to +140 °F		
Oper. temp.	0 to +40 °C / +32 to +104 °F		
Oper. humidity	0 to 95 %RH		
Protection class	IP40 acc. to EN 60529		
Power supply	Lithium polymer battery pack		
Battery life	10 h measurement time (at +20 °C/+68 °F) / Mains operation possible		
Battery charging	In instrument via charger		
Interface	IrDA interface / optional: Bluetooth		
Permit	Acc. to EN 50543		
EC guideline	2004/108/EC		
Dimensions	190 x 65 x 40 mm		
Weight	200 g		
Warranty	Instrument: 12 months Rech. battery: 12 months CO sensor: 12 months CO <sub>2</sub> sensor: 12 months		

Sensor type	Meas. range	Accuracy ±1 digit	Resolution
CO sensor	0 to 100 ppm	±3 ppm (0 to 20 ppm) ±5 ppm (>20 ppm)	0.5 ppm
CO <sub>2</sub> sensor	0 to 10.000 ppm	±300 ppm (0 to 4.000 ppm) ±8% of mv (4.000 to 6.000 ppm) ±500 ppm (6.000 to 10.000 ppm)	10 ppm
Temperature/humidity	+5 to +95 %RH	±2.5 %RH (5 to 95 %RH)	0.1 %RH
module	-10 to +60 °C	±0.5 °C (±1 Digit)	0.1 °C



### Accessories

Accessories	Part no.
Accessories for measuring instrument	
Temperature/humidity module Ø 25 mm, plug-in	0636 9725
USB mains unit incl. cable	0554 1105
Transport and Protection	
Topsafe testo 315-3	0516 0223
Case for secure storage of measuring instrument	0516 0191
Printer and Accessories	
Testo fast printer IRDA with wireless infrared interface; 1 roll thermal paper; 4 AA batteries	0554 0549
BLUETOOTH printer set with wireless BLUETOOTH interface; incl. 1 roll thermal paper, rechargeable battery and mains unit	0554 0553
Spare thermal paper for printer, permanent ink	0554 0568



**Additional accessories** 

Control and adjustment set for humidity sensors (11.3 %RH and75.3 %RH)

Topsafe testo 315-3



Temperature/humidity module Ø 25 mm, plug-in



Case for secure storage of measuring instrument (without content)



0554 0660

Testo fast printer IRDA with wireless infrared interface



# CO<sub>2</sub> measuring instrument

testo 535 - Secure monitoring of Indoor Air Quality

Highly accurate CO<sub>2</sub> measurement

Long-term stable 2-channel infrared sensor

Long-term monitoring thanks to max. and mean value calculation

No necessity for repeated adjustments



ppm CO<sub>2</sub>

Bad air quality in indoor rooms due to excessively high CO2 concentrations (greater than 1000 ppm) leads to tiredness, lack of concentration and can even cause illness. testo 535 is a precise, reliable CO<sub>2</sub> measuring instrument for monitoring Indoor Air Quality. The high-quality and stable 2-channel infrared sensor allows long-term measurements, and does not require repeated adjustment.

With the switchable display of min./max. and mean values, the customer has an optimum overview of the measurement results.

The measurement data can be documented on site incl. date and time with the Testo fast printer. The optional TopSafe provides optimum protection of the instrument from dust, dirt and impact.



# **Technical data / Accessories**

#### testo 535

testo 535 CO2 measuring instrument with fixed probe incl. battery and calibration protocol

Part no. 0560 5350



Sensor type	2 channel infrared sensor
Meas. range	0 to +9999 ppm CO <sub>2</sub>
Accuracy ±1 digit	±(50 ppm CO <sub>2</sub> ±2% of mv) (0 to +5000 ppm CO <sub>2</sub> ) ±(100 ppm CO <sub>2</sub> ±3% of mv) (+5001 to +9999 ppm CO <sub>2</sub> )
Resolution	1 ppm CO <sub>2</sub>

#### General technical data

Air
0 to +50 °C
-20 to +70 °C
9V block battery
6 h
190 x 57 x 42 mm
300 g
LCD, 2 lines
ABS
1 year
10 min

Accessories Part no.

#### Accessories for measuring instrument

testo 312 Case for secure storage of measuring instrument for secure storage of measuring instrument	0516 0191	
Testo fast printer IRDA with wireless infrared interface; 1 roll thermal paper; 4 AA batteries	0554 0549	
External fast charger for 1-4 AA rech. batteries, incl. 4 Ni-MH rech. batteries with individual cell charging and charge control display, incl. impulse trickle charging, integrated discharge function, with built-in international mains plug, 100-240 V, 300 mA, 50/60 Hz	0554 0610	
Spare thermal paper for printer (6 rolls), permanent ink measurement data documentation legible for up to 10 years	0554 0568	
9V rech. battery for instrument, instead of battery	0515 0025	
Recharger for 9V rechargeable battery, for external recharging of 0515 0025 battery	0554 0025	
Desk-top power supply with international connection options	0554 1143	
ISO calibration certificate/CO2 CO2 probes; calibration points 0; 1000; 5000 ppm	0520 0033	



# SO<sub>2</sub> analyzer

testo 325-I - The entry into portable SO<sub>2</sub> flue gas measurement

Easy operation and handlling thanks to large display

Easy exchange of gas sensor by the user

Continuous display of measurement values in the display, as long as pump is running





the testo 325-I is the ideal introduction to affordable flue gas analysis for  $\mathrm{SO}_2$ . Easy handling and low acquisition and operating costs make it the ideal partner for atmospheric checks in thermal processes and in production.



## **Technical data / Accessories**

# testo 325-l SO<sub>2</sub> Set

testo 325-I set SO<sub>2</sub>, includes flue gas analyzer testo 325-I SO2 and sampling probe, with batteries and calibration protocol

Part no. 0563 3260



#### Flue gas probes

#### Part no.

Sampling probe, 300 mm immersion depth, Ø 6 mm, Tmax. +500 °C, 3 m hose, without handle, is included in $SO_2$ set	Included in set	
Sampling probe, 700 mm immersion depth, incl. probe stop, Tmax +1000°C, 3 m hose	0699 3451/3	

#### **Sensor type**

Meas. range	0 to +3000 ppm SO <sub>2</sub>
Accuracy ±1 digit	±5% of mv (+400 to +3000 ppm SO <sub>2</sub> ) ±20 ppm SO <sub>2</sub> (0 to +400 ppm SO <sub>2</sub> )
Resolution	1 ppm SO <sub>2</sub>

#### General technical data

Response time t <sub>90</sub>	80 s
Oper. temp.	+4 to +45 °C
Storage temp.	-20 to +50 °C
Battery life	4 h
Power supply	Mains unit
Battery type	4 AA batteries
Material/Housing	ABS
Dimensions	216 x 68 x 47 mm
Weight	500 g

Warranty:

Measuring instrument: 1 year (excluding working parts, e.g. gas

sensors, ...)

Gas sensors: 6 months

Power supply: Battery or power unit

Accessories	Part no.
Testo fast printer IRDA with wireless infrared interface; 1 roll thermal paper; 4 AA batteries; for printing out measurements on site , for printing out measurements on site	0554 0549
External fast charger for 1-4 AA rech. batteries, incl. 4 Ni-MH rech. batteries with individual cell charging and charge control display, incl. impulse trickle charging, integrated discharge function, with built-in international mains plug, 100-240 V, 300 mA, 50/60 Hz	0554 0610
Spare thermal paper for printer (6 rolls), permanent ink, measurement data documentation legible for up to 10 years	0554 0568
Transport case testo 325-I or instrument, probes and accessories; for safe and orderly storage; plastic	0516 3250
Sealing cone with knurled screw for sampling probe	0554 9050
Mains unit 230 V / 8V / 1 A, for instrument (European plug); for mains operation and battery recharging	0554 1084
Spare particle filter testo 325-I, 10 off; for CO flue gas probe	0554 0040