



BRIGON 500-1

**Amazingly simple
flue gas analyser**

**Just the right one
for heating, sanitary,
ventilation and
conditioning servicemen**



TÜV By RgG 263

Technical data

Measuring of flue gas temperature	
Range:	-0 °C ... + 600 °C Typ K, 0...400 °C TÜV-approved
Resolution:	0,1 °C
Max. deviation:	≤ ± 2 °C (to 125 °C), ≤ ± 3 °C (125...250 °C), ≤ ± 4 °C (from 250 °C)
Measuring of ambient air temperature	
Range:	0 °C ... + 100 °C Typ K, 0...80 °C TÜV-approved
Resolution:	0,1 °C
Max. deviation:	≤ ± 1 °C
Measuring of O₂-concentration	
Range:	0...21,0 Vol% O ₂
Resolution:	0,1 Vol%
Max deviation:	≤ ± 0,3 Vol%
Measuring of CO-concentration	
Range:	0...2000 ppm, short-time overstressing up to 4000 ppm possible
Resolution:	1 ppm
Max. deviation:	≤ ± 20 ppm (to 400 ppm), ≤ ± 5 % of reading (from 400 ppm)
Measuring of pressure and draught	
Range:	-160 mbar ... + 160 mbar
Resolution:	0,01 mbar
Max deviation:	≤ ± 3 %
BRIGON Fixed Service Prices	
after 1 year use	€ 85
after 2 years use	€ 175
after 3 years use	€ 85
after 4 years use	€ 175
Includes one year warranty extension, complete maintenance, in years 2 and 4 O ₂ and CO sensor replacement, calibration certificate for all measuring channels on TÜV approved test stand, cleaning and software upgrade	



Item-No.	BRIGON 500-1 TÜV By RgG 263, approved acc. to EN 50379-1 and EN 50379-2 for O₂, temperature and pressure, EN 50379 –3 for CO																											
	<p>BRIGON 500-1, measuring and display device incl. CO sensor, O₂ sensor and draught- / pressure sensor, infrared interface to printer</p> <p>The device for the adjustment of the heating systems and for flue gas analysis.</p> <table border="0"> <tr> <td>Measurments:</td> <td></td> <td>Fuels:</td> </tr> <tr> <td>Ambient air temperature</td> <td>0 °C...+100 °C</td> <td>Light oil, Liquid gas,</td> </tr> <tr> <td>Flue gas temperature</td> <td>0 °C...+600 °C</td> <td>Natural gas, Pellets,</td> </tr> <tr> <td>Differential pressure</td> <td>-160 mbar ... +160 mbar</td> <td>Propane, Butane</td> </tr> <tr> <td>Oxygen concentration</td> <td>0 ... 21,0 Vol% O₂</td> <td></td> </tr> <tr> <td>Carbon monoxide</td> <td>0 ... 2000 ppm CO (short-time overstressing to 4000 ppm)</td> <td></td> </tr> <tr> <td>Calculations:</td> <td></td> <td></td> </tr> <tr> <td>Carbon monoxide_{undiluted}</td> <td>Carbon dioxide CO₂</td> <td>Lambda</td> </tr> <tr> <td>Stack loss q_A</td> <td>Combustion efficiency Eta</td> <td>CO/CO₂-ratio</td> </tr> </table>	Measurments:		Fuels:	Ambient air temperature	0 °C...+100 °C	Light oil, Liquid gas,	Flue gas temperature	0 °C...+600 °C	Natural gas, Pellets,	Differential pressure	-160 mbar ... +160 mbar	Propane, Butane	Oxygen concentration	0 ... 21,0 Vol% O ₂		Carbon monoxide	0 ... 2000 ppm CO (short-time overstressing to 4000 ppm)		Calculations:			Carbon monoxide _{undiluted}	Carbon dioxide CO ₂	Lambda	Stack loss q _A	Combustion efficiency Eta	CO/CO ₂ -ratio
Measurments:		Fuels:																										
Ambient air temperature	0 °C...+100 °C	Light oil, Liquid gas,																										
Flue gas temperature	0 °C...+600 °C	Natural gas, Pellets,																										
Differential pressure	-160 mbar ... +160 mbar	Propane, Butane																										
Oxygen concentration	0 ... 21,0 Vol% O ₂																											
Carbon monoxide	0 ... 2000 ppm CO (short-time overstressing to 4000 ppm)																											
Calculations:																												
Carbon monoxide _{undiluted}	Carbon dioxide CO ₂	Lambda																										
Stack loss q _A	Combustion efficiency Eta	CO/CO ₂ -ratio																										
5301	<p>BRIGON 500-1 complete basic set</p> <p>incl. measuring and display device, probe with thermocouple 250 mm, connecting cable and tube, cone , ambient air probe MINI, protective rubber sleeve with magnet, rechargeable battery Ni / MH, charger</p>																											
5381	<p>BRIGON 500-1 set in ABS carrying case</p> <p>incl. measuring and display device, probe with thermocouple 250 mm, connecting cable and tube, cone, ambient air probe 150 mm with cable 1,5 m and MINI, rubber cones set, maintenance set, protective rubber sleeve with magnet, rechargeable battery Ni / MH, charger, thermoprinter BIRD, set of tubes 1 m with coupling for measuring differential pressure and ABS carrying case</p>																											
Item-No.	BRIGON accessories and spares																											
5351	Ambient air probe 150 mm with cable 1,5 m																											
5352	Ambient air probe 300 mm with cable 1,5 m																											
4450	Teflon-cone for ambient air probe 3 mm Ø																											
5031	Magnet for ambient air probe 3 mm Ø																											
5320	Probe 250mm with thermocouple, connecting cable and tube 2m																											
5321	Grip with cable for BRIGON 500-1 with bayonet joint, length 2,0m																											
5331	Probe 250 mm with thermocouple and bayonet joint																											
5341	Multihole probe with bayonet joint for flue gas pipe 60-170 mm Ø																											
5345	Multihole probe with grip for measurement in balanced flues																											
4458	Rubber cones set 11-24 mm for multihole probe for measurement in balanced flues																											
5325	Set of tubes 1 m with coupling for measuring of differential pressure (2 pieces)																											
5330	Probe for measuring chimney draught																											
3324	Particle filter (Pack of 2)																											
5327	Maintenance set for BRIGON 500																											
5385	Battery Ni / MH (pack of 4)																											
5380	Charger																											
5730	Thermoprinter BIRD with infrared interface complete with batteries and thermopaper																											
5735	Thermopaper for thermoprinter BIRD, item.-No. 5730 (pack of 5)																											
6130	BRIGON self sealing plastic bag for printouts (pack of 10)																											
5338	BRIGON ABS carrying case for BRIGON 500-1																											
5339	XL ABS carrying case for BRIGON 500-1																											

BRIGON Messtechnik GmbH • Kronberger St. 11 • 63110 Rodgau • Germany
Tel. + 49 6106 8207 0 • Fax + 49 6106 8207 40 • e-mail:info@brigon.de • Internet:www.brigon.de