LGP 900

Technical Data Sheet

Series	
Type/model	102 20

Certificates	
Marking	CE

Device data	
Dimensions (W × D × H)	48.3 × 35.6 × 26.7 cm (19″ × 14″ × 10.51″) (19″ × 8 HP × 6 U)
Weight	• approx. 10 kg (22 lb) • approx. 15 kg (33 lb) with table housing

Features	
Gas connections	test gas connection • for carrying out device inspections (test gas: 100 ppm CH4 in synth. air)
Pump	suction pump • power: 14 l/min
Interface	• Bluetooth • USB
Processor	• microcontroller 8 bit • dual USB host controller
GNSS	GNSS/INS system
Sensor	laser • measurement principle: TDLAS (at 1653 nm)

Weather station	• anemometer
	  ◦ wind speed: 0 – 40 m/s (0 – 131 ft/s) (resolution 0.1 m/s (0.33 ft/s))
	  ◦ wind direction: 0 – 359.9° (resolution 0.1°)
	• temperature: -40 – 80 °C (-40 – 176 °F)
	• air pressure: 300 – 1100 hPa (resolution 0.1 hPa)
	• for roof mounting: maximum speed 100 km/h (62 mph)

Operating conditions	
Operating temperature	-10 – 50 °C (14 – 122 °F)
Humidity	0 – 99% r.h., non-condensing
Atmospheric pressure	800 – 1100 hPa
Protection rating	IP20
Non-permitted operating environments	• in EX-protected areas • in open space
Position of use	installed horizontally in vehicle

Storage conditions

Storage temperature	-40 – 80 °C (-40 – 176 °F)
Humidity	0 – 99% r.h., non-condensing

Power supply

Power supply	12 V • without external alarm: max. 2 A • with external alarms: max. 20 A

Positioning by GNSS

Accuracy	• horizontal: 1.5 m (4.92 ft) • with RTK (Real-Time Kinematic): up to 10 cm (3.94″) (depending on RTK service)
Measuring method, additional	GNSS/INS with RTK correction
Aerial	external

Laser sensor

Gas type	CH4
Measuring range	• 0 – 40000 ppm in synthetic air • automatic zero point correction
Resolution/detection sensitivity	0.01 ppm at 500 ms integration time
Response times	2 s
Warm-up time	30 s
Measuring error	≤ 0.8 ppm for measured values up to 100 ppm
Interference	none known
Lifetime, expected	5 years

Additional data

Cable type	• power supply: 2×6 mm^2 (0,0093 in^2) • aerial: RG58 FME, ready-to-fit
Cable length	• power supply: 5 m (16.4 ft) • aerial: 5 m (16.4 ft)
Attachment option	installation in table housing or rack (19")
Via connected computer	• acoustic warning when the alarm threshold is exceeded • storage of measurement data using SeCuRi SAT software

Computer system requirements

Operating system	Windows 11
RAM	minimum 16 GB
Interface	Bluetooth 5.3 or higher
Screen resolution	1024 × 768

Assignment

System components of	LaserGasPatroller
For use with	SeCuRi SAT software

Subject to technical changes.