

Gas measuring technology

Gas leak detector **HUNTER** and carpet probe **TS14**

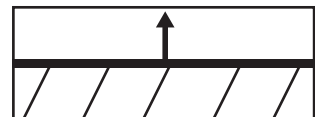
Two true professionals for systematic gas pipeline network monitoring.



On the hunt for leaks

If systematic gas pipeline inspection is your business, Eswers is currently offering two new professional tools to help improve performance and results.

While some developers are forced to compromise with multi-purpose devices, the new **HUNTER** gas leak detector is optimized for just one application - hunting for gas leaks! And the advantages become clear as soon as it is used in practice.

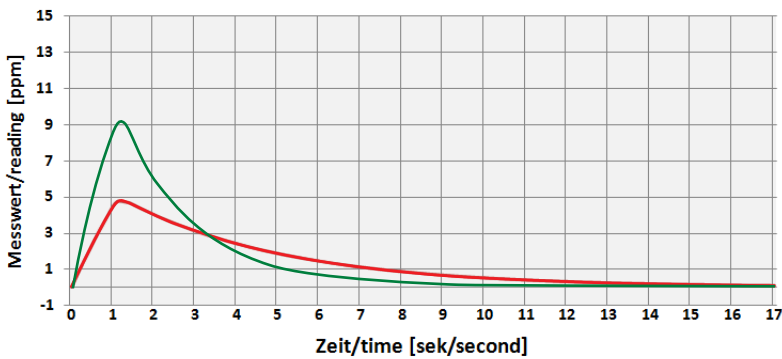


The sample gas guidance and sensor chamber have been developed using all our experience. And the interplay between the selected and moisture-compensated sensors has also resulted in unrivalled reaction times and stability of the measured values. Even the smallest gas leaks are safely detected and the gas detector receives reliable measurement values which are easy to evaluate.

Gas leak detector Hunter

A faster reaction time not only ensures that an alarm is triggered sooner. The alarm threshold may otherwise not be reached at all for small concentrations of gas and minor leaks. A „over run“ in the leaking area can therefore not be ruled out.

The graph below clearly shows that a rapid reaction time (green curve for $T_{90}^*=4s$) results in a peak of > 9ppm, while the red curve ($T_{90}^*=9s$) doesn't even reach 5ppm. These calculations apply for a gas concentration spanning 1m which is covered at 4 km/h.



* A comparison of the reaction time is carried out with the so-called T_{90} value. This value shows how many seconds it takes to reach 90% of the measured value.

With a weight of just 1.1 kg and the recommended lap belt as a carrier system, the gas detector can work with the device in complete comfort for more than eight hours.



The daily sensitivity tests are stored in the **HUNTER**.

All relevant results can be read out and stored.

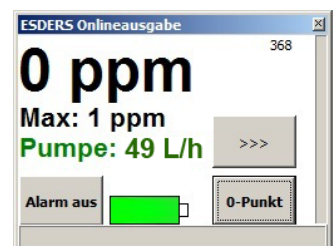


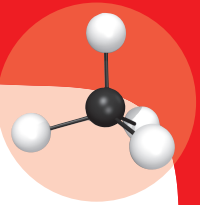
Documentation and optional Bluetooth data transfer

As monitoring work is always documented and carried out digitally, the **HUNTER** gas leak detector can also be supplied with an optional Bluetooth module. Even with Bluetooth transmission activated, the device offers over 10 hours of operating time. The Bluetooth function can also be used reliably under difficult conditions over distances over 2m.

The accompanying PC software reads out the measured value, the pump performance and the battery status and shows this data in a small window on the PC. Alarm thresholds can also be specified and controlled for a „PC alarm“.

But the **HUNTER** can also document the measured values independently of the parallel transmission of the measured data. The maximum gas concentration is stored in a specified interval and can be evaluated using the PC1 software. The memory offers a capacity of over 250 operating hours with data storage every second.

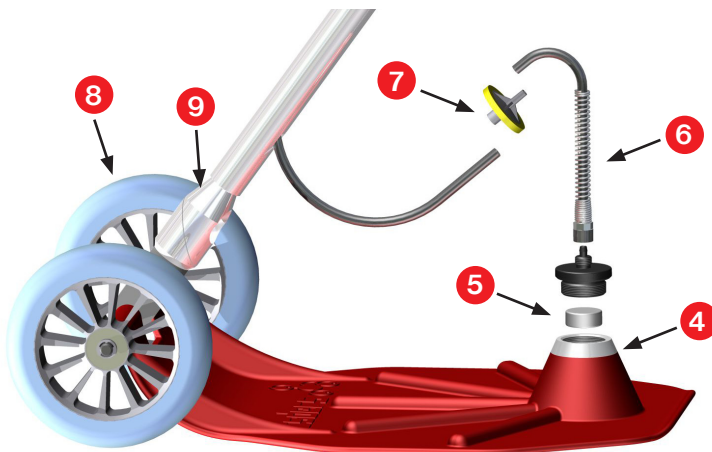




Carpet probe TS14

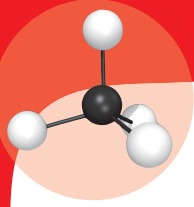


In addition to the gas leak detector, the probes also play a key role. The construction of the probes contributes significantly to the quality of the samples taken. In this area too, Esders is once again entering entirely new territory. The carpet mat is made from a newly developed material, which combines the highest possible abrasion resistance with flexibility and suitability for use in a wide range of temperatures. This has enabled us to more than double the service life of the carpet mat.



1. Cast carpet mat free from the material wear common in deep drawn mats
2. Stabilising mould elements enable optimal fit on the ground and enable the carpet to be pulled backwards
3. Comprehensive flow channels for sampling
4. High suction dome for reduced dust and moisture collection
5. Filter holder made from aluminium and POM to cut off sand and fine dust via high quality filter panel
6. Kink protection for the hose
7. Hydrophobic filter, which retains water effectively and is protected from sand and fine dust by the upstream filter

8. Ball bearing mounted wheels, in a size which also enables the carpet probe to be used under most cars
9. Hinge system, which enables the carpet probe to be moved even in narrow radii or in a laterally offset position (optional)
10. Telescopic handle bar for optimal adjustment of the length during use and space-saving transportation



HUNTER - Technical data:	
Display	LCD graphic display 128 x 64 pixels, illuminable Display of measured value, maximum value and bar graph
Power supply	NiMH battery pack, 4,8 Volt, 3,8 Ah
Operating temperature	-15°C to +50°C
Operating time (without backlight)	> 10 hours incl. Bluetooth- transmission > 11 hours without Bluetooth- transmission
Charging	Charging cradle supplied by 12 Volt or 230 Volt, charging time approx. 5 hours
Data Store	Flash memory 4 Mbyte for more than 1 Mio. measurement values, Documentation of the sensitivity tests
Protection category	IP 54
Dimensions	168 x 90 x 80 mm without couplings
Weight	approx. 1.100 g, incl. battery pack
Measurement principle	Semiconductor sensor
Measurement range	0 to 1.000 ppm CH ₄ , Resolution: 1 ppm, 5 ppm 0,1 to 2,2 Vol.% CH ₄ , Resolution: 0,1 Vol.%
Response time	T ₉₀ ≤ 4 seconds for CH ₄ (Methane)
Pumping capacity	> 40 l/h, >300 mbar

Hunter accessories



Item no. 202002
230 V Power Supply Unit



Item no. 202019
Charging cradle



Item no. 202020
Communication cradle



Item no. 232131
Carpet probe TS14



Item no. 232086
Bell probe



Item no. 202027
Case



Item no. 331022
PED Hunter 10 ppm



Item no. 372007
test gas: 10 ppm CH₄

Other accessories on inquiry!

Technical specifications subject to change!