

Gas leak detector for the detection of R1234yf and R134a in potentially explosive gas atmospheres



- Handheld multi-range gas leak detector for the selective detection of the refrigerants R1234yf and R134a
- Use in potentially explosive gas atmospheres of zone 1
- Device implemented in type of protection „i“ (intrinsic safety)
- Display of the detected gas concentration value (lower ppm-range up to 3 Vol% (50 % Lower explosion limit / LEL of R1234yf) on LC-Display
- Additional linear cumulative display of the detected gas concentration level by bargraph (up to 20 steps/segments)
- LED indicator for reached or exceeded thresholds of the detected gas concentration (<100 ppm; ≥100 ppm; ≥200 ppm; ≥1,5 Vol%; ≥3 Vol%)
- Automatic measuring range change-over
- Automatic zero setting on air after switch on
- Suppression of background concentrations up to 250 ppm by SET-key
- Concentration-dependent increasing intermittent acoustic signal tone (can be switched off); continuous tone when OL (OverLoad) > 3 Vol% is reached (can be switched off)
- Automatic sensor check with error recognition
- Integrated rechargeable NiMH-Battery-Pack

Ex II 2G Ex ib IIC T2 Gb
0 °C ≤ Ta ≤ +40 °C

EU-type examination certificate number:
IBExU18ATEX1144 | Issue 0

The leak detector type UST PEAKER® Ex R1234yf / R134a complies with the requirements of explosion protection for equipment of Group 2, Category 2G, in type of protection intrinsic safety „i“ for gas atmospheres of Group IIC, temperature class T2.



UST PEAKER® Ex R1234yf/R134a in docking station (docking station optional)

UST PEAKER® Ex R1234yf/R134a and docking station in equipment case (docking station and equipment case optional)

Selected technical data

Detection ranges R1234yf und R134a	1 ppm... 999 ppm/0,1 Vol%... 3 Vol% (resolution 1 ppm/0,1 Vol%)
Response time	ca. 2 s
Time to operation readiness	≤ 120 s
Gas sensor	Metal-oxide(MOX) semiconductor-gas sensor (UST Triplesensor®) photo-acoustic detector
Dimensions (LxWxH)	ca. 240 mm x 50 mm x 28 mm
Net weight	ca. 350 g (without plug-in charger)
Power consumption	ca. 0,85 VA
Integrated rechargeable battery power pack	4 x 1,2 V NiMH (Attention: Charging only outside the explosion hazard area using the plug-in charger included in delivery of the gas leak detector!)
Operating time	≥ 6 h (power pack is fully charged)
Allowable operation temperature/humidity	0 °C ... +40 °C / 20... 80 % r. H. (non-condensing)
Allowable storage and transportation temperature/humidity	-25 °C ... +70 °C / 20... 80 % r. H. (non-condensing)

Allowable operating, transport and storage conditions	
Any contamination of the gas sensor must be avoided. The application, transport and storage environment has to be free of any contamination, particularly protected against chemical substances, e.g. silicones. In particular direct contact with substances containing, silicones, sulphurous substances or non-desorbing inorganic components or contaminations (e.g. smoke, fumes, oils, greases or evaporating liquids) may cause damaging the sensor or to changes in the sensor resistance and/or in the sensor characteristics. Possible consequences are reduced sensitivity, display of misleading concentration values, or display of a background concentration.	
Scope of delivery	Gas leak detector, plug-in charger, operating instructions
Optional	Equipment case, docking station
Conformity:	
2011/65/EU: Restriction of the use of Hazardous Substances Directive (RoHS)	
Explosive atmospheres – Equipment – General requirements/ Equipment protection by intrinsic safety "i"	
EN IEC 60079-0:2018 / EN 60079-11:2012	
ATEX: Equipmet and protective systems for use in potentially explosive atmospheres	
Directive 2014/34/EU	

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