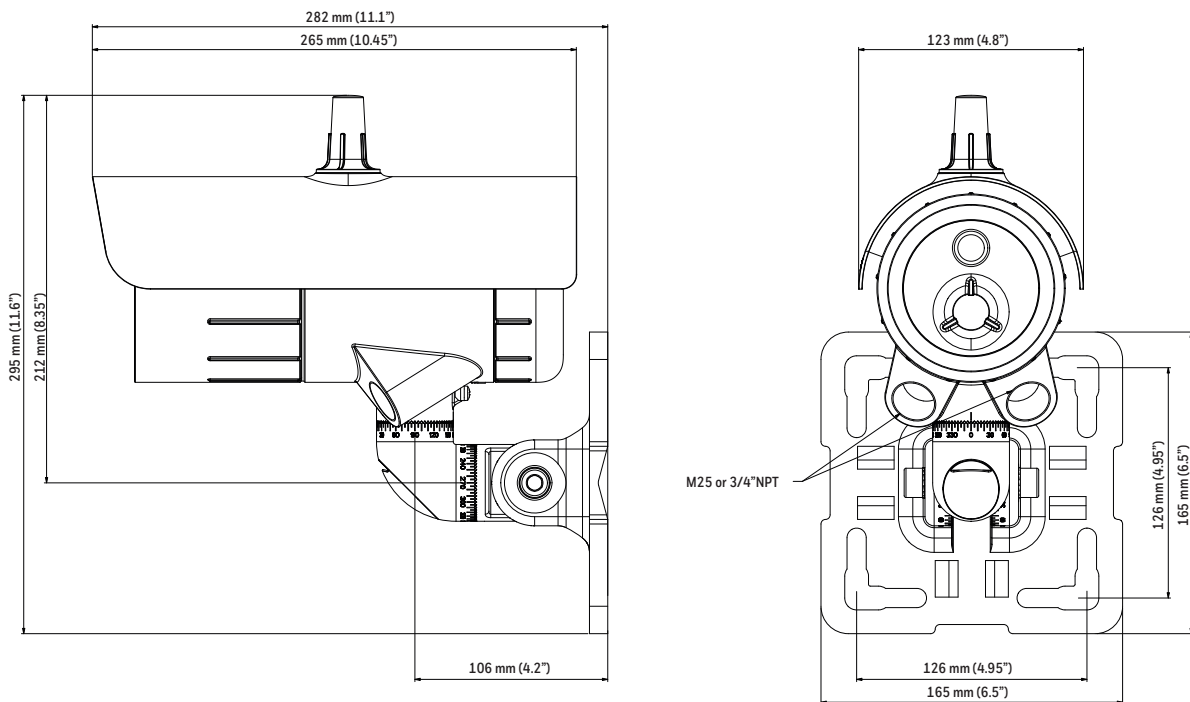


Searchzone Sonik™ Ultrasonic Gas Leak Detector

| GENERAL | |
|--|--|
| Manufacturer | Honeywell |
| Model | Searchzone Sonik™ Ultrasonic Gas Leak Detector |
| Part Numbers | SZSK-SMGXX, SZSK-SNGXX |
| GAS DETECTOR SPECIFICATIONS | |
| Sensor Type | Tuned piezoelectric transducer |
| Detection Method | Sound Pressure Level at sensor |
| Frequency Range | 18 kHz to 70 kHz |
| Dynamic Range | 40 dB to 140 dB |
| Calibration | Factory calibrated |
| Detector Range | Typically 20 m on-axis radius (background noise dependant) |
| Recommended Alarm Setting | 6 dB above background noise |
| Cone of Detection | +/- 90 degrees (Standard Mode), +/- 20 degrees (Focus Mode); solid angle from on axis to 6 dB down |
| Speed of Response | Sensor response 1 s; Programmable Verification time from 0s to 600 s. |
| Electronic Self Test | Built in test diagnostics |
| Storage Temperature | -55° C to +75° C (-67 °F to 167 °F) |
| Operating Temperature | -55° C to +75° C (-76 °F to +167 °F) |
| Operating Humidity | 0 to 100% RH |
| Warm-up Time | Less than 5 minutes (operational) |
| Power Supply & Maximum Power Consumption | 24Vdc nominal (18 Vdc to 32 Vdc); 167mA at 24 Vdc (3 W), 4W for ambient operating temperature -30°C and above, 15 W for ambient operating temperature below -30°C (heater is active) |
| Cable entries | 2 x M25 or 2 x 3/4" NPT |
| Outputs | Relays (1 fault, 2 Alarm) – contact rating 2 A (resistive load). Fully configurable 4 – 20 mA isolated, sink or source (maximum loop resistance 600 ohms); Fault < 1 mA, Warning 3 mA, Over-range 22 mA. Linear configurable output corresponding to Sound Pressure Level. |
| Analog Thresholds | 0 mA Fault, 2 mA Inhibit, 4-20 mA Normal Operation |
| Digital Communications | Modbus RTU RS-485. HART® with handheld communicator or hardwired. Bluetooth to smartphone or tablet (20 m range, device dependent). |
| Event Logs | Time stamped |
| Visual Indication | High Visibility light ring; green/yellow/red/blue multi-colour to indicate detector status. Green (normal) indication can be disabled via Searchzone Sonik App. |
| Dimensions | Instrument: 103 dia x 235 x 176 mm Standard Mount: 165 x 165 x 127 mm Large Mount: 210 x 210 x 127 mm |
| Enclosure Material | Stainless Steel 316L; with paint finish |
| Standard Adjustable Mounting Bracket | Stainless Steel. Graduated to enable Searchzone Sonik to be simply mounted and aimed in 5 degree steps, weight 2.9 kg (6.4 lbs) |
| Large Adjustable Mounting Bracket | Stainless Steel. Graduated to enable Searchzone Sonik™ to be simply mounted put on one line and aimed in 5 degree steps, weight 3.5 kg (7.7 lbs) |
| Interfaces | Bluetooth® non-intrusive connection to suitable mobile device running the Searchzone™ Sonik mobile app. Range up to 20 m (mobile device dependant). |
| Vibration | 2 - 60 Hz, maximum peak to peak amplitude 1 mm |
| Ingress Protection (IP) Rating | IP 66 / 67 (Type 4X), according to NEMA 250 |
| Core Approvals (pending) | EN 50270: 2015 (EMC) IEC/EN 61000-6-4; EMC Directive 2014/35/EU IEC/EN/UL/CSA 61010 (Electrical Safety) FCC RoHS, China RoHS |

GAS DETECTOR SPECIFICATIONS

| | |
|---|--|
| Safety Approvals | <p>ATEX Ⓜ II 2 GD Ex db ia IIC T4 Ex tb IIIC T85°C Ex db eb ia IIC T4 Tamb -55 to +75°C (-67 to 167 °F)</p> <p>cULus Class I, Div 1, B, C & D Class II/III, E, F & G (pending) Tamb -55 to +75°C Class I Zone 1 AEx d ia IIC T4 (USA) Class I Zone 1 Ex d ia IIC T4 (Canada)</p> <p>IECEX Ex d b ia IIC T4 Ex tb IIIC T85°C Ex db eb ia IIC T4 Tamb -55 to +75°C (-67 to 167 °F)</p> |
| Marine Approvals (pending) | Type approved to DNV, BV, Lloyds, ABS Location Classes: Temp B, Humidity B, Vibration A & C, EMC B |
| Other Approvals (pending) | BT SIG (Bluetooth), RED, FCC+, country-specific wireless approvals EN 61508:2010 SIL2 -55 °C to +75 °C, independently assessed by TÜV CCCF Inmetro CU TR-Ex (Eurasian Customs Union), Tamb -60 to +85°C (-76 to 185 °F) |
| Bluetooth communication security | Certificate-based mutual authentication. Encryption to AES128 |
| Warranty Period | 36 months from date of shipment. |
| ACCESSORIES | |
| Adjustable Mounting Bracket | Standard bracket (included). Large bracket (optional) |
| Sunshade | Plastic (included), stainless steel sunshade (optional) |
| Hand-Held Tester | Hand-Held Sonik Test Unit. featuring leak seeking function. Check with Honeywell for availability. |
| Hand Held Communicator | I.S. Android Smartphone. Download the Searchzone Sonik™ App from Google Play Store |



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www.honeywellanalytics.com

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