



NEW

## Future-proved hybrid alerting

The RES.Q is Swissphone's most innovative alerting terminal. Alerts are received using the time-tested and reliable POCSAG technology. Additionally, cellular networks can be used as a separate alert channel for increased resilience. Cellular technology also enables different forms of feedback:

- **Technical feedback:** The RES.Q sends an acknowledgement to the operations center as soon as it receives an alarm. Alerts can be forwarded to deputies in case no acknowledgement is received in the operations center.
- **Tactical feedback:** The receiver of a message confirms whether he will attend or not. The officer in charge immediately knows the effective personnel strength and can alert additional rescue forces if necessary.
- **The cellular technology** channel can be used to send user availability or to monitor device status.

The **RES.Q XS** is the basic model. It features an internal cellular module to offer technical acknowledgements and tactical confirmations.

The **RES.Q S** offers additional localisation capabilities using an integrated GPS receiver. This makes it possible to locate personnel and determine how far they are from the place of action.

The **RES.Q M** offers the possibility to send an emergency call using an emergency button.

The **RES.Q L** is the top model of the RES.Q series, offering outstanding investment protection with 3G cellular technology and iBeacon indoor localisation.

### Key features

- » Technical and tactical feedback
- » Sending and receiving status reports
- » Exceptional POCSAG reception also during mobile radio connectivity
- » Hybrid alerting reception (POCSAG & cellular technology)
- » Positioning features
  - Outdoor: GPS
  - Indoor: IBT position transmitter
  - iBeacon (RES.Q L)
- » Manual alerting via cellular
  - Emergency button with position report
- » 64 select as well as toggle profiles available
- » 32 main addresses (RICs) with 4 sub-addresses each (128 individual addresses)
- » Signal strength indicator (RSSI) for POCSAG & cellular
- » Option: IDEA™ encryption (128 Bit)
- » Option: multi-channel, scanner in one device



# RES.Q

|                                                    | Performance features                                                                    | Technical Data                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards, compliance and environmental conditions | Standards                                                                               | ETSI EN 300390 (Radio: Receiver)<br>EN 62368-1 (Safety)<br>EN 62209-2 (SAR)<br>EN 301489-1 /-2 / -17 / -52 (EMC)<br>EN 60068-2-6 (Vibration)<br>EN 60068-2-27 (Shock)<br>EN 60068-2-31 (Drop 1.5 m)<br>EN 60529 IP52*<br>ETSI EN 300328 (Radio: 2.4GHz ISM)<br>ETSI EN 301511 (Radio: cellular)<br>ETSI EN 301908 (Radio: UMTS)<br>*IP54 ensured with leather carry bag |
|                                                    | Temperature range                                                                       | -20 to +55 °C, cellular module (-10 to +55 °C)                                                                                                                                                                                                                                                                                                                          |
| POCSAG module                                      | Frequency bands                                                                         | VHF 2-m band 146-155/155-164/164-174 MHz<br>UHF 70-cm band 430-450/450-470 MHz                                                                                                                                                                                                                                                                                          |
|                                                    | Frequency processing                                                                    | PLL, frequency adjustable via programming software:<br>• VHF 2-m band: whole sub-band (9/10 MHz)<br>• UHF: ±1.0 MHz                                                                                                                                                                                                                                                     |
|                                                    | Channel spacing                                                                         | 12.5, 20/25 kHz                                                                                                                                                                                                                                                                                                                                                         |
|                                                    | Sensitivity*:<br><small>*typical value at 2 m UB (best position on «salty man»)</small> | @ 512 Bit/s 3.0 µV/m<br>@ 1200 Bit/s 3.5 µV/m<br>@ 2400 Bit/s 4.0 µV/m                                                                                                                                                                                                                                                                                                  |
|                                                    | Signal strength indicator (RSSI)                                                        | 5 bar display. More bars means stronger signal                                                                                                                                                                                                                                                                                                                          |
|                                                    | Cap codes (RIC)                                                                         | • 32 cap codes (RIC), with 4 sub-addresses each, frame independent<br>• 128 single addresses (any combination of RIC and SubRIC)<br>• 128 RIC names with 8 characters                                                                                                                                                                                                   |
|                                                    | Alerting                                                                                | • Acoustic > 88 dB(A) @ 30 cm distance<br>• Vibration<br>• Bright display backlight<br>• Up to 64 user profiles or selectable RICs                                                                                                                                                                                                                                      |
|                                                    | Messages                                                                                | • More than 100 messages of up to 253 characters<br>• Up to two additional message folders<br>• 128 fixed texts with 32 characters each can be stored<br>• PIN secured message storage                                                                                                                                                                                  |
|                                                    | Supports                                                                                | • Express-Alarm®<br>• On-air programming                                                                                                                                                                                                                                                                                                                                |
|                                                    | Options                                                                                 | • IDEA™ encryption (128 Bit)<br>• Multi-channel, scanner                                                                                                                                                                                                                                                                                                                |
| Display and case                                   | Display                                                                                 | • High resolution display<br>• White backlight<br>• Font sizes (lines x characters): 3x16, 4x21, 5x21 or 3/4/5 Lines proportional fonts                                                                                                                                                                                                                                 |
|                                                    | Dimensions (H x W x D)                                                                  | 80 x 53 x 24 mm                                                                                                                                                                                                                                                                                                                                                         |
|                                                    | Weight (incl. battery)                                                                  | 110 g                                                                                                                                                                                                                                                                                                                                                                   |
| Power management                                   | Type of battery                                                                         | Lithium-polymer rechargeable battery 3.7V / 550 mAh (charger included)                                                                                                                                                                                                                                                                                                  |
|                                                    | Operating time                                                                          | POCSAG only: ~ 600 h<br>POCSAG + data/SMS: ~ 60-80 h (response)<br>POCSAG + data/SMS + GPS: ~ 50-70 h                                                                                                                                                                                                                                                                   |
|                                                    |                                                                                         |                                                                                                                                                                                                                                                                                                                                                                         |
| GPS module                                         | Channels                                                                                | 50                                                                                                                                                                                                                                                                                                                                                                      |
|                                                    | GNSS-System                                                                             | GPS                                                                                                                                                                                                                                                                                                                                                                     |
|                                                    | Sensitivity in tracking mode                                                            | -162 dBm                                                                                                                                                                                                                                                                                                                                                                |
|                                                    | Time to first fix                                                                       | Cold: 30 sec, assisted: 3 sec, hot: 1 sec                                                                                                                                                                                                                                                                                                                               |
|                                                    | Current time and date                                                                   | UTC synchronization via GNSS                                                                                                                                                                                                                                                                                                                                            |
| Bluetooth LE module                                | Standard                                                                                | Core V4.2                                                                                                                                                                                                                                                                                                                                                               |
|                                                    | Supported features                                                                      | Apple iBeacon ( localization)                                                                                                                                                                                                                                                                                                                                           |
| Sensors                                            | Emergency detection sensors                                                             | 3-axial acceleration                                                                                                                                                                                                                                                                                                                                                    |
| Accessories                                        | Programming software                                                                    | PSWplus                                                                                                                                                                                                                                                                                                                                                                 |
|                                                    | Chargers                                                                                | LiGRA Expert                                                                                                                                                                                                                                                                                                                                                            |
|                                                    | Carrying accessories                                                                    | • Leather case<br>• Safety chain                                                                                                                                                                                                                                                                                                                                        |

Specifications subject to change

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