RES.Q

Future-proved hybrid alerting

With the RES.Q terminal, alerts are sent using proven and reliable POCSAG paging technology. The integrated cellular module enables hybrid alerting, using cellular networks as a separate alert channel for increased resilience. It also enables different forms of feedback before and after an alert, allowing to increase the efficiency and speed of alerting and mobilization.

- **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 basic model is the **RES.Q XS**. A cellular module is integrated within the device to provide technical and tactical feedback as well as availability management.

The **RES.Q L** is equipped in addition with a GPS and BLE module which supports indoor and outdoor localization via iBeacon. First responders can thus be localized and their distance from the emergency site can be determined. The RES.Q has also been upgraded with an SOS emergency call button.

The RES.Q is available with the following cellular modules:

- 2G / 3G: Cellular module for UMTS/GPRS.
- 2G / LTE-M (LTE Cat. M1): LTE-M consume less energy than 2G / 3G, and battery life is correspondingly longer. Better reception inside buildings is another advantage over conventional mobile networks. Where these networks are not yet available, the existing 2G network is automatically used as the fallback path.

Key features

- Exceptional POCSAG reception also during mobile radio connectivity
- Positioning features (RES.Q L)
  - Outdoor: GPS
  - Indoor: Bluetooth LE iBeacon
- Manual alerting via cellular (RES.Q L)
  - 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)
- Option: IDEA encryption (128 Bit)
- Option: multi-channel, scanner in one device

IDEA WPLL eco mode hybrid RSSI connect

www.swissphone.com

RES.Q

	Performance features	Technical Data
Standards, compliance and environmental conditions	Standards (see declaration of conformity)	RED 2014/53/EU (Radio Equipment Directive) ETSI EN 300 390 (Radio: Receiver) EN 60068-2-6 (Vibration) EN 60068-2-27 (Shock) EN 60068-2-31 (Drop 1.2 m) EN 60529 (IP52*) *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 UHF 70-cm band 430-450/450-470 MHz
	Frequency processing	PLL, frequency adjustable via programming software: • VHF 2-m band: whole sub-band (9/10 MHz) • UHF: ±1.0 MHz
	Channel spacing	12.5, 20/25 kHz
	Sensitivity*: *typical value at 2 m UB (best position on «salty man»)	@ 512 Bit/s 3.0 µV/m @ 1200 Bit/s 3.5 µV/m @ 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 • 128 single addresses (any combination of RIC and SubRIC) • 128 RIC names with 8 characters
	Alerting	• Acoustic > 88 dB(A) @ 30 cm distance • Vibration • Bright display backlight • Up to 64 user profiles or selectable RICs
	Messages	• More than 100 messages of up to 253 characters • Up to two additional message folders • 128 fixed texts with 32 characters each can be stored • PIN secured message storage
	Supports	• Express-Alarm® • On-air programming
	Options	• IDEA encryption (128 Bit) • Multi-channel, scanner
Cellular module	Frequency bands	2G/3G: 900/1800/2100 MHz (UTRA band 1, 3, 8) 2G/4G: 800/900/1800 MHz (UTRA band 20, 3, 8)
	Connectivity	2G/3G: 3GPP Rel, 7 - SMS, GPRS, EDGE, UMTS, HSPA+ 2G/4G: 3GPP Rel. 13 - SMS, GPRS, EDGE, LTE Cat. M1 (LTE-M)
	Network identification	SIM card (mini)
GNSS module	Channels	72 channels ublox 8 Engine
	GNSS-System	• GPS, SBAS L1 C/A • Galileo on request
	Sensitivity in tracking mode	-167 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	BLE iBeacon (localization)
Sensors	Emergency detection sensors	3-axial acceleration
Display and case	Display	• High resolution display • White backlight • 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 POCSAG + data/SMS: ~ 60-80 h (response) POCSAG + data/SMS + GPS: ~ 50-70 h
Accessories	Programming software	PSWplus
	Chargers	LiGRA Expert
	Carrying accessories	• Leather case • Safety chain
	Battery	Lithium-polymer rechargeable battery (3.7V / 1300 mAh)

Specifications subject to change

SWISSPHONE

Swissphone Wireless AG
Fälmisstrasse 21
CH-8833 Samstagern
Tel. +41 44 786 77 70
Fax +41 44 786 77 71
E-Mail info@swissphone.com

EN 12/2020 0342286 V11 WEC