# S900ANONTECHNICAL FEATURES

| RECEIVER                               |   |
|--|---|
|  | GPS: L1 C/A, L1C, L1P, L2C, L2P, L5             |
| Signal Tracking                        | GLONASS: L1 C/A, L1P, L2 C/A, L2P, L3           |
|  | BEIDOU: B1, B2, B3, ACEBOC                      |
|  | GALILEO: E1, E5a, E5b, ALTBOC, E6               |
|  | QZSS: L1 C/A, L1C, L2C, L5, LEX                 |
|  | IRNSS: L5                                       |
|  | SBAS: L1, L5                                    |
| L-Band                                 | Atlas H10 / H30 / Basic (optional) <sup>5</sup> |
| Bridging of RTK outages                | aRTK - Works up to 20 minutes                   |
| Channels                               | 800   |
| Position Rate                          | 10 Hz (optional 20-50Hz) <sup>5</sup>           |
| Signal Reacquisition                   | <1s   |
| RTK Signal Initialization <sup>4</sup> | 2 to 4 seconds                                  |
| Hot Start                              | Typically < 15 s                                |
| Initialization Reliability             | > 99.9 %  |
| Internal Memory                        | 8 GB  |
| Micro SD Card                          | Expansion slot up to 32 GB                      |
| Tilt sensor                            | E-Bubble  |
| i iit sensor                           | IMU (optional) <sup>5</sup>                     |
|  |   |
| POSITIONING1                           |   |
| STATIC GNSS SURVEYIN                   | G   |
| High Precision Static                  | 2.5 mm + 0.1 ppm RMS                            |
| Horizontal                             | 2.5 mm + 0.1 ppm kM5                            |
| High Precision Static                  | 3.5 mm + 0.4 ppm RMS                            |
| Vertical                               |   |

| Static and Fast Static<br>Horizontal | 3 mm + 0.5 ppm RMS                  |
|--------------------------------------|-------------------------------------|
| Static and Fast Static<br>Vertical   | 5 mm + 0.5 ppm RMS                  |
| CODE DIFFERENTIAL PO                 | SITIONING                           |
| Accuracy                             | 0.40 m RMS                          |
| SBAS POSITIONING <sup>2</sup>        |                                     |
| Accuracy                             | 0.60 m RMS                          |
| REAL TIME KINEMATIC (-               | < 30 Km) – NETWORK RTK <sup>3</sup> |
| Fixed RTK Horizontal                 | 5 mm + 0.5 ppm RMS                  |
| Fixed RTK Vertical                   | 10 mm + 0.5 ppm RMS                 |
|                                      |                                     |

# INTEGRATED GNSS ANTENNA

High accuracy four constellation antenna, zero phase center, with internal multipath suppressive board

### INTERNAL DADIO (--41---1)5

| Туре            | Tx - Rx                              |
|-----------------|--------------------------------------|
| Frequency Range | 410 - 470 MHz                        |
|                 | 902.4 - 928 MHz                      |
| Channel Spacing | 12.5 KHz / 25 KHz                    |
| Range           | 3-4 Km in urban environment          |
|                 | Up to 10 Km with optimal conditions4 |

- Accuracy and reliability are generally subject to satellite geometry (DOPs), multipath, atmospheric
  conditions and obstructions. In static mode they are subject even to occupation times: the longer
  is the Baseline, the longer must be the occupation time. Depends on SBAS system performance.
   Network RTK precision depends on the network performances and are referenced to the closest.
- Physical base station.

  Varies with the operating environment and with electromagnetic pollution.
- 5. Optional, it can be activated via activation code.



If you are looking for a "Made in Italy" instrument with a 3 years warranty, you can purchase the italian version of our S900A GNSS Receiver.

STONEX AUTHORIZED DEALER

# INTERNAL MODEM

| INTERNAL MODEM |                             |  |
|----------------|-----------------------------|--|
|                | LTE FDD:                    |  |
|                | B1/B2/B3/B4/B5/B7/B8/B12/   |  |
|                | B13/B18/B19/B20/B25/B26/B28 |  |
| Band           | LTE TDD: B38/B39/B40/B41    |  |
|                | UMTS: B1/B2/B4/B5/B6/B8/B19 |  |
|                | GSM: B2/B3/B5/B8            |  |
|                | Nano SIM card               |  |

| COMMUNICATION      |   |
|--------------------|---|
| I/O Connectors     | 7-pins Lemo and 5-pins Lemo<br>interfaces. Multifunction cable with<br>USB interface for PC connection  |
| Bluetooth          | 2.1 + EDR, V4.1   |
| Wi-Fi              | 802.11 b/g/n  |
| Web UI             | To upgrade the software, manage the<br>status and settings, data download,<br>etc. via smartphone, tablet or other<br>electronic device with Wi-Fi capability |
| Reference outputs  | RTCM 2.3, 3.0, 3.2<br>CMR, CMR+, ROX  |
| Navigation outputs | NIMEA 0183  |

### POWER SUPPLY

| Battery      | 2 rechargeable and replaceable<br>7.2 V - 3.400 mAh |
|--------------|---|
|              | Intelligent lithium batteries                       |
| Voltage      | 9 to 28 V DC external power input                   |
|              | with over-voltage protection (5 pins                |
|              | Lemo)   |
| Working Time | Up to 12 hours (2 batteries hot swap)               |
| Charge Time  | Typically 4 hours                                   |

### PHYSICAL SPECIFICATION

| Dimensions            | φ 157 mm x 76 mm  |
|-----------------------|---|
| Weight                | 1.19 Kg (with one battery)<br>1.30 Kg (with two batteries)                |
| Operating Temperature | -40°C to 65°C (-40°F to 149°F)  |
| Storage Temperature   | -40°C to 80°C (-40°F to 176°F)  |
| Waterproof/Dustproof  | IP67  |
| MIL- STD              | MIL-STD-810H  |
| Shock Resistance      | Designed to endure to a 2 m pole drop on<br>concrete floor with no damage |
| Vibration             | Vibration resistant   |



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