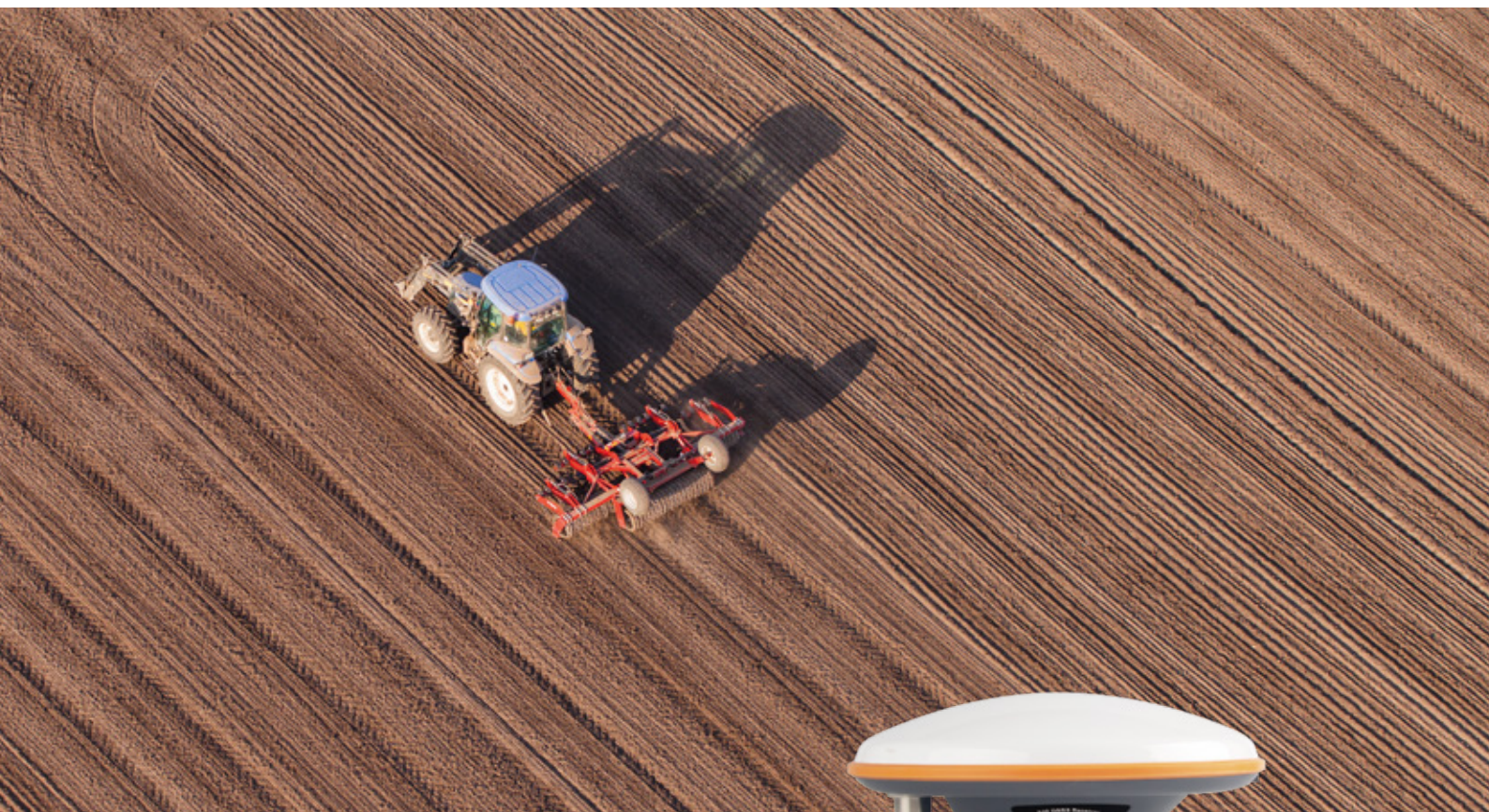


# S20

## GNSS RECEIVER

Accurate Navigation, Precision Farming



### PRECISION NAVIGATION

Equipped with a high-precision GNSS engine, the S20 offers full-constellation tracking and versatile work modes. When without base stations, it attains 15cm pass-to-pass accuracy in single-point smooth mode, 20cm accuracy in HAS-PPP mode, and 0.6m accuracy in SBAS mode. In RTK mode, it delivers centimeter-level accuracy for precision navigation.

### ALL-IN-ONE DESIGN

The S20 receiver integrates the GNSS antenna and GNSS module together, largely streamlining the system components and installation. By simply installing the S20 on the top of vehicles, users can easily obtain accurate positioning, which is specially designed for precision agriculture and vehicle navigation.

### HIGH COMPATIBILITY

The S20 boasts broad compatibility with various tractor and vehicle models, requiring no specific vehicle prerequisites. Featuring a standard DB9 serial port and NMEA-0183 message output, it facilitates seamless integration into navigation system development, ensuring high adaptability and ease of use.

## SATELLITES TRACKING

Channels	1408
GPS	L1C/A, L2P (Y), L2C, L5
GLONASS	L1, L2
BDS	B1I, B2I, B3I, B1C, B2a
Galileo	E1, E5a, E5b
QZSS	L1, L2, L5
SBAS	WAAS, EGNOS, MSAS, GAGAN, SDCM
PPP	Galileo HAS
Cold start	< 20 s
Hot start	< 10 s
RTK initialization time	<5 s (typical)
RTK initialization reliability	>99.9%
Signal reacquisition	< 1 s

## ACCURACY

Single-point pass-to-pass	15 cm
Single baseline RTK	8 mm + 1 ppm Horizontal 15 mm + 1 ppm Vertical
SBAS	0.6 m Horizontal 0.8 m Vertical
HAS-PPP	0.2 m Horizontal 0.4 m Vertical
Standalone	1.5m Horizontally 2.5m Vertically
Velocity accuracy	0.03 m/s

## DATA FORMAT

Differential Data Format	RTCM2.X, RTCM3.X
Data Output	NMEA-0183
Data Update Rate	1HZ, 2HZ, 5HZ, 10HZ, 20HZ

## COMMUNICATION

Bluetooth	BT4.2 BR/EDR
Interface	- DC2.1 female for power supply - DB9 female for data transmission

## ELECTRICAL

Power supply	5 ~ 28V DC
Power consumption	≤ 1.0 W

## PHYSICAL

Size	Φ150 mm × 58.4 mm
Weight	424g

## ENVIRONMENTAL

Operating Temperature	-40 °C to +65 °C
Storage Temperature	-45 °C to +85 °C
Waterproof & Dustproof	IP67
Shock	Survive from a 2m-drop

All specifications are subject to change without notice.

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