PARTNERED PRODUCTS

SingularPad
Field Surveying Software

- Full Work Modes Support
- Various Survey & Stakeout Methods
- Bluetooth & Wi-Fi Connectivity
- Laser Surveying & Visual Targeting
- Real-time Visual AR Stakeout
- RTK Visual Photogrammetry
- Both GNSS receiver & Total Station Support

Point Survey	Point Stakeout	CAD Mapping	DSM Stakeout	Stake Road	Volume Calculation	Perimeter and Area	Localization	Survey Range Settings

SC26O DATA COLLECTOR

Android
Powered by
Android **11 OS**

IP68
IP68 & **1.5m**
anti-drop

4G
VARIOUS
communication

5.45 inch
5.45" sunlight-readable
touch screen

12h
9000mAh battery
for **18h** operating

TF
4GB RAM + **64GB**
ROM + **Extend TF**

Horus Visual & Laser GNSS Receiver
Version 12-09-2025

SATELLITES TRACKING

Channels	1408
BDS	B1I, B2I, B3I, B1C, B2a, B2b
GPS	L1C/A, L1C, L2C, L2P(Y), L5
GLONASS	G1, G2, G3
Galileo	E1, E5a, E5b, E6
QZSS	L1C/A, L1C, L2C, L5
NavIC	L5
SBAS	WAAS, EGNOS, SDCM, BDSBAS, GAGAN
L-Band	Support
Cold start	<30s
RTK Initialization Time	<5s(typical)
RTK initialization reliability	>99.9%
Re-acquisition	<1s

ACCURACY

Standalone	1.5m Horizontally 2.5m Vertically
DGPS	0.4m Horizontally 0.8m Vertically
Static Post-processing	2.5mm+0.5ppm Horizontally 5mm+0.5ppm Vertically
RTK	8mm+1ppm Horizontally 15mm+1ppm Vertically
PPP	5cm Horizontally 10cm Vertically
SBAS	< 1.0 m 3D RMS
Time Accuracy	20ns
Tilt Surveying	< ±2.5cm, within 60° Tilt Range
AR Stakeout	8mm+1ppm Horizontally 15mm+1ppm Vertically
Photogrammetry	2–5 cm @ 2–20 m range, typical
Laser tilt surveying	3 cm @ 10 m range, typical

DATA FORMAT

Data Output Format	- NMEA-0183 - RINEX 3.02/3.04 - Binary Format *.xyz
Data Update Rate	1～50Hz Selectable
Correction Data Format	- RTCM v3.3/3.2/3.1/3.0
Supported Protocols	Ntrip client, Ntrip Server, Ntrip Caster, TCP, UDP

COMMUNICATION

UHF Modem	- Frequency range: 410-470MHz - Protocol(RX): CSS,TRIMATLK, TRANSEOT, SATEL,TRIMMARK3, etc. - Channel spacing:25KHz - Receive Only
Bluetooth	BT4.0 Dual Mode

NFC	Support NFC Connection
WiFi	802.11 a/b/g/n/ac
Interface	- 1 Type-C Interface for Data Transmission and Charging - 1 SMA Connector

HARDWARE

Platform	Quad-core 1.5GHz CPU, 2.0Tops NPU
Laser Sensor	- Class 3R, avoid direct eye exposure - Range: 50m
Camera	- Dual-camera with 2MP global shutter - Frame: 25 fps

USER INTERACTION

Front panel	- 3 LED indicators indicating satellite tracking, differential data and power - 1 button for power on/off
WebUI	- Accessible via Wi-Fi - Support Configuration, Status Checking, Data Chekcing, Data Storage and System Upgrade

ELECTRICAL

Power Consumption	> 3.5 W [2]
Battery	- 6600 mAh, up to 12 hours working time - Fast charge of 3.5 hours charging time

PHYSICAL

Size	Φ133 mm × 72 mm
Weight	> 850 g
Storage	8 GB [3]
Housing Material	Magnesium-aluminum Alloy

ENVIRONMENTAL

Working Temperature	-30℃ to + 65℃
Storage Temperature	-55℃ to + 85℃
Humidity	100% Non-condensing
Waterproof & Dustproof	IP67
Drop	Designed to Survive a 2m Drop onto Concrete

1. The power consumption varies with the different work modes.
2. Storage can be expanded to 32GB according to user demands.

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Singular XYZ ®
SingularXYZ Intelligent Technology Ltd.

Horus
VISUAL & LASER GNSS RECEIVER

Redefining Measurement With Vision

Singular XYZ ®

HORUS VISUAL & LASER GNSS RECEIVER

The Horus GNSS receiver combines strong GNSS engine, new-gen IMU, versatile work modes and leading-edge visual & laser technologies in a compact, rugged housing, bringing an efficient, precise and smart surveying experience for professionals.

By fusing dual cameras and a laser sensor, Horus enables immersive AR stakeout, non-contact laser surveying with visual aiming, and high-precision photogrammetry—expanding the capabilities of traditional RTK surveying.

Full-Constellation
1408 channels track GPS, BDS, GLONASS, Galileo, QZSS, NavIC, and SBAS simultaneously, delivering centimeter-level accuracy.

12Hrs Battery Life
Built-in battery with 6600mAh large capacity support more than 12 hrs working time and only 3.5hrs charging time.

Next-Gen IMU
New-generation IMU enhances reliability and integrates with pole surveying, AR stakeout, laser surveying, and photogrammetry.

Versatile Connectivity
Support Bluetooth/WiFi/NFC/USB connectivity, you can easily interact with Horus in various ways by different purpose.

Web UI Access
Access via WiFi to configure work modes, download data, upgrade firmware, and check device status through a web interface.

Back Camera
Green Laser
Front Panel
Bottom Camera
Enhanced Radio
IP67 Housing

SEE CLEARER, MEASURE FURTHER
Hard-to-Reach Points, Hazardous Areas, GNSS-Denied Zones - Measured with Ease

Non-Contact Laser Surveying

Precise Laser Surveying
Visible green laser delivering centimeter-level accuracy

Camera-Assisted Targeting
See clearly, aim precisely - no matter the distance

Visual Photogrammetry

HD Starlight-Grade Camera
Capture clear, detailed images anytime

Tap & Measure on SingularPad
Instant centimeter-level photogrammetry

INTUITIVE AR VISUAL STAKEOUT
Stake What You See, Boost Efficiency by Over 50%

Long-Range Targeting with Precision Guidance
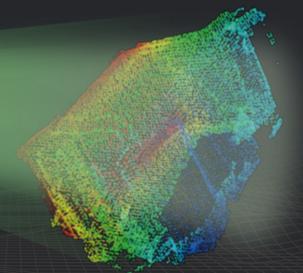
Close-Range Stakeout with Immersive AR View

Auto-Switch Based on Distance
Always the Best View for Every Stakeout Point

VISUAL DATA READY FOR 3D MODELING
From Visual Capture to Seamless Modeling

Integrated Camera For Visual Data Capture

Compatible With Leading 3D Modeling Software