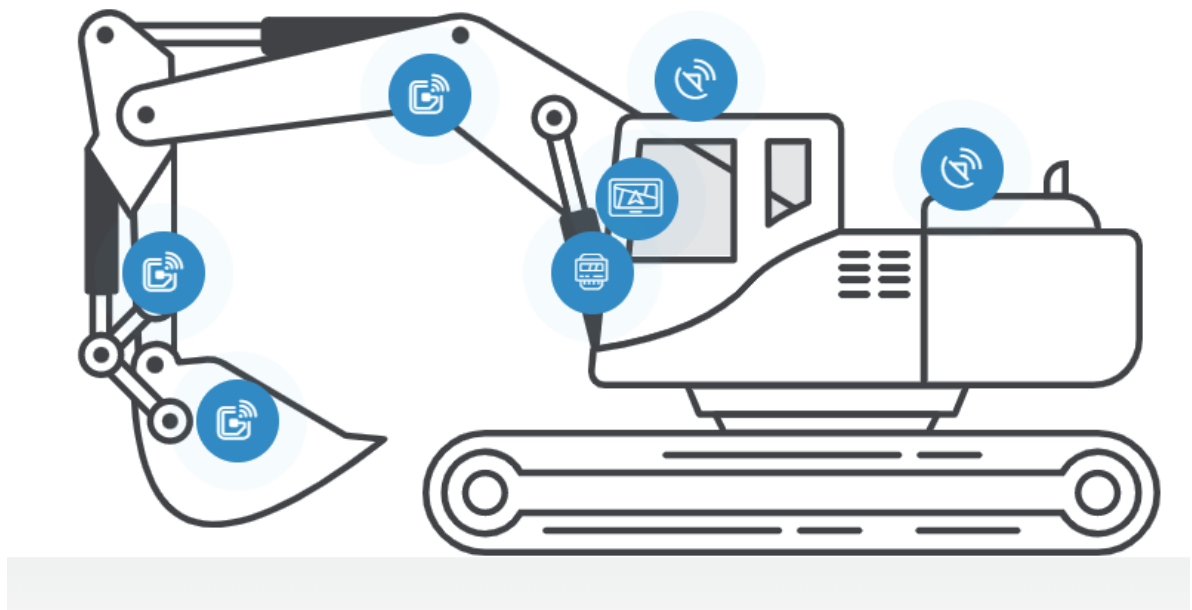


SITENAV

SITENAV 3D machine control system for excavators

Enhance project management, safety and productivity on your jobsites with our 3D SITENAV excavator control system. Compatible with all types of machines and buckets, our solution can be easily transferred between excavators. With permanent geo-referencing of the machine within its working area, you can position your bucket with precision. Use the control screen or LED indicator directly from the cab for simple and accurate guidance.



Package composition

- ✓ 5 wireless sensors and their plates
- ✓ 2 Spotman GNSS antennas with mounting brackets
- ✓ LED bargraph, mounting bracket and cables
- ✓ 1 8" Windows 11 tablet, holder and cables
- ✓ 1 SITENAV 3D Excavator software module
- ✓ 1 Backpack for transport

CT140T SPOTMAN GNSS



Positioning⁽¹⁾

- ▶ 1408 GNSS channels (2): receiver supports all satellite positioning systems (GPS, GLONASS, GALILEO, BEIDOU, SBAS)
- ▶ 200 Hz IMU tilt sensor for correcting alignment errors up to 60°
- ▶ Maximum accuracy: Horizontal: 0.8 cm, Vertical: 1.5 cm

GNSS Performance⁽²⁾

Channels	1408 GNSS channels
GPS	L1C, A, L2C, L2P (Y), L5
GLONASS	L1, L2, L3*
Galileo	E1, E5a, E5b, E6*
BeiDou	B1I, B2I, B3I, B1C, B2a, B2b
QZSS	L1, L2, L5, L6*
NavIC (IRNSS)	L5*
PPP	B2b-PPP
SBAS	L1, L5

Data Formats

- ▶ RTCM 2.x, RTCM 3.x
- ▶ CMR input/output
- ▶ HCN, HRC
- ▶ RINEX 2.11, 3.02
- ▶ NMEA 0183 output
- ▶ NTRIP Client , NTRIP Caster

Connectivity

- ▶ Wireless: Bluetooth 4.2, Wi-Fi, NFC, UHF, 4G modem
- ▶ Cellular: 4G LTE
- ▶ Modem: 410–470 MHz, Rx/Tx
- ▶ Internal memory: 8 GB

Design

- ▶ Display: 1.1" color OLED Controls: 2 LEDs, 2 physical buttons
- ▶ Protection: IP67 (dustproof and waterproof, withstands immersion up to 1 m)
- ▶ Battery: 9,600 mAh with up to 34 hours continuous RTK mobile use and up to 16 hours RTK base use⁽³⁾

Hardware

- ▶ Weight: 1.15 kg
- ▶ Dimensions: 152 x 78 mm

Ports

- 1 × 7-pin LEMO port (RS-232)
- 1 × USB Type-C port (external power, data transfer, firmware update)
- 1 × UHF antenna port (female TNC)



P80 TABLET

Specifications

- ▶ Operating System: Windows® 11
- ▶ Processor & Graphics Intel® Atom™ x5-Z8350, Quad-Core CPU (up to 1.92 GHz) Intel® HD Graphics 400
- ▶ Memory & Storage: 4 GB RAM MicroSD support up to 128 GB

General

- ▶ Dimensions & Weight: 215 × 135 × 17 mm, 740 g
- ▶ Connectivity: Bluetooth, Wi-Fi, NFC, GPS, 4G integrated
- ▶ Ruggedness: IP67 + MIL-STD-810G (resistant to temperature, humidity, vibration, shock, drops)
- ▶ Battery life: up to 9 hours

Screen

- ▶ 8" IPS HD touchscreen (1280 × 800 pixels)
- ▶ Dragontrail™ tempered glass
- ▶ Sunlight-readable (400 nits)
- ▶ Multi-touch, wireless technologies enabled

Cameras

Dual : Rear 5 MP - Front 2 MP

Power

- ▶ Input: AC 100V-240V, 50-60 Hz Output: 5V DC @ 3A
- ▶ Battery: 7,800 mAh
- ▶ Runtime: 9+ hours (tested with 720p video playback at 50% brightness)

Interfaces / Ports

1 × USB 2.0 Type-A (host)	1 × MicroSD (SDHC/SDXC) slot
1 × USB 2.0 Micro-B (OTG)	1 × Micro SIM (3G/4G) slot
1 × 3.5 mm audio jack	1 × DC power jack
1 × Mini HDMI 1.4a	1 × POGO port (12)

WIRELESS SENSORS

Power

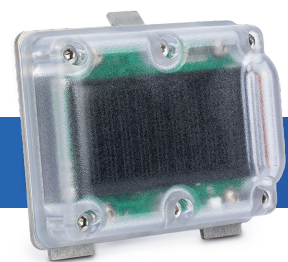
- ▶ Solar charged
- ▶ 80 hours of battery life

General

- ▶ Dimensions: 7.5 x 5 x 2.5 cm
- ▶ Weight: 280 g
- ▶ Rugged protective shell
- ▶ IP67 water-resistant

Fixing

- ▶ Double-sided 3M adhesive mounting plate
- ▶ Mounting with tie rod



LEDS BARGRAPH



General

Red, orange, and green LED display; horizontal + vertical display.

▶ Dimensions: 19 * 7.5 * 2

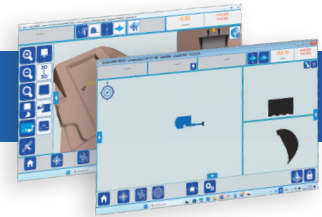
▶ Weight: 300Gr

Connections

▶ Bargraph holder with power cable to tablet

SOFTWARE

The SITENAV 3D excavator guidance software was developed by AIDE SAS (Simplified joint stock company) – SITENAV for Windows. Software size: less than 200 MB.



ACCESSORIES

Battery and charger



Connections

▶ DC10-15V 2A input
▶ Charge indicator

▶ DC4.2V 1.6A output

General

▶ EC certified
▶ Dimensions: 15 x 12 x 9,5 cm

▶ Weight: 125Gr
▶ LI-ION battery

Quick Release

Robust and durable material: stainless aluminium, durable and robust to withstand shocks and vibrations from vehicle guidance.

Secured locking mechanism: designed with extreme precision, black anodised, treated against corrosion and abrasion.

Backpack

Die-cut foam for equipment storage and protection.

(1) Accuracy and reliability are determined under open sky, free of multipaths, optimal GNSS geometry and atmospheric condition. Performances assume minimum of 5 satellites, follow up of recommended general GPS practices. (2) Compliant, but subject to availability of BDS ICD, GLONASS, Galileo, QZSS and IRNSS commercial service definition. GLONASS L3, Galileo E6, Galileo E6 High Accuracy Service (HAS), BDS B2b and SBAS L5 will be provided through future firmware upgrade. (3) Battery life is subject to operating temperature.

