SPECIFICATION

Surveying Performance
- 220 Channels
- Signal Tracking
  - GPS L1C/A, L1C, L2C, L2E, L5
  - BDS B1, B2, B3
  - GLONASS L1C/A, L1P, L2C/A, L2P, L3
  - SBAS L1C/A, L5 (only for the satellites supporting L5)
  - Galileo GIOVE-A, GIOVE-B, E1, E5A, E5B
  - QZSS, WAAS, MSAS, EGNOS, GAGAN, SBAS
- GNSS Features
  - Positioning output rate: 1Hz~50Hz
  - Initialization time: <10s
  - Initialization reliability: >99.99%

Positioning Precision
- Code Differential GNSS Positioning
  - Horizontal: ±0.25 m + 1 ppm
  - Vertical: ±0.50 m + 1 ppm
  - SBAS positioning accuracy: typically<5m 3DRMS
- Static GNSS Surveying
  - Horizontal: ±2.5 mm + 0.5 ppm
  - Vertical: ±5 mm + 0.5 ppm
- Real-Time Kinematic Surveying (Baseline<30km)
  - Horizontal: ±8 mm + 1 ppm
  - Vertical: ±15 mm + 1 ppm
- Network RTK
  - Horizontal: ±8 mm + 0.5 ppm
  - Vertical: ±15 mm + 0.5 ppm
  - RTK initialization time: 2~8s

Physical
- Dimension: 16.5 cm X 16.8cm X 12.2cm (LWH)
- Weight: 1.85kg (including installed battery)
- Material: Magnesium aluminum alloy shell

Environmental
- Operating: -45℃ ~ +60℃
- Storage: -55℃ ~ +85℃
- Humidity: Non-condensing
- Waterproof/Dustproof
  - IP67 standard, protected from long time immersion to 1m depth
  - IP67 standard, fully protected against blowing dust
- Shock and Vibration
  - OFF Status: Withstand 2m pole drop onto the cement ground
  - ON Status: Withstand 40G 10 milliseconds sawtooth wave impact test

Electrical
- Power Consumption: 2W
- Power supply: 9-25V DC, over-voltage protection
- Battery
  - RBuilt-in Lithium-ion battery, 7.4V, 10000mAh
- Battery Life
  - Single battery: 30h (static) 10h (base UHF) 12h (rover)
- WiFi Hotspot/Datalink
  - WiFi hotspot allows smart terminal to connect internal webserver To control and monitor receiver
  - T66V is able to broadcast and receiver differential data via WiFi

CE FC

Certification
CE Mark approval
EU Identification No.0700
FCC Identifier 2ADPC-T66
Class B Part 15
ISO9001/14001

DEALER

Communications and Data Storage
- I/O Port
  - 5PIN LEMO external power port + Rs232
  - 7PIN LEMO RS232 + USB (OTG)
  - 1 network/radio data link antenna port
  - SIM card slot
- Wireless Modem
  - Integrated iDatalink™ technology
  - Internal radio transceiver 1/2/3W, up to 8km
  - External radio transmitter 5/25W, up to 20km
- Working frequency: 410-470MHz
- Communication iDatalink™ technology
  - TrimTalk450s, TrimMark3, PCC EOT, SOUTH
- Cellular Mobile Network
  - TDD/FDD-LTE 4G
  - WCDMA 3.5G module, GPRS/EDGE compatible, CDMA2000/EVDO 3G optional
- Double Module Bluetooth
  - BLEBluetooth 4.0 standard, supports Android and iOS
  - Bluetooth 2.1 + EDR standard
- NFC Communication
  - Realizing close range (<10cm) automatic pair between T66V and controller (equipped with NFC wireless communication module required)
- Data Storage/Transmission
  - 8GB SSD internal storage, more than 6 years raw observation data (about 1.4M/day), based on recording from 14 satellites Plug and play, OTG function supported
- Data Format
  - Differential: CMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2
  - GPS output: NMEA 0183, PJK plane coordinates, binary code
  - Network model support: VRS, FKP, MAC, supporting NTRIP protocol

Inertial Sensing System
- Tilt Survey
  - Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle of the centering rod
- Electronic Bubble
  - Controller software display electronic bubble, checking leveling status of the centering rod real time

User Interaction
- Buttons
  - 1 x Power, 2 x Function, 1 x Reset, 4 x Indicators
- Thermometer
  - Built-in thermal sensor and intelligent temperature system which can monitor and control receiver temperature in real-time
- WebUI, iVoice® Guide

	Pathfinder T28	Vanguard T66V	Pioneer T66
Full Metal	√		
IDatalink™ tech.	√	√	
UHF Radio	1/2/3W, >8km	1/2/3W, >8km	Optional
Lean&GO	√	√	
Intelligent System	√	√	
Web Interface	√	√	
WiFi	√	√	
Memory	8Gb SSD	4Gb	4Gb

SANDING

SANDING OPTIC-ELECTRICS INSTRUMENT CO., LTD.
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Tel: +86-20-22826691
E-mail: export@sandinginstrument.com
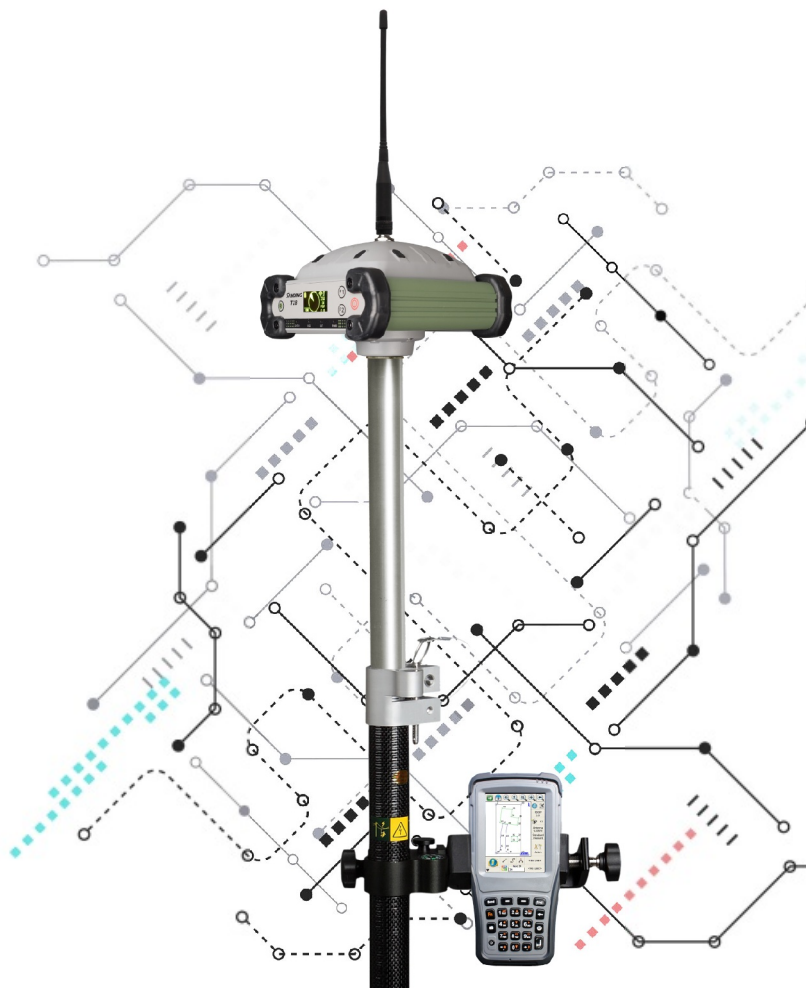
SANDING
Every Point Matters

Sanding Positioning System

Pathfinder T28

- Sanding iDatalink™ technology
- Full metal jacket
- Dual internal battery
- Long duration for static and RTK base
- True color OLED screen for on-field job
- All revolutionary updates from Sanding Vantage T66V

Pathfinder **T28**

When performance makes the deal

Sealed by full metal jacket and powerful dual inside battery, Pathfinder T28 can always survive in these challenging environments and ensure your day job breezily. No matter in the thick Schwarzwald, freezing Alaska or deadly Sonoran, Pathfinder T28 is standing by you to make every point matter.

Primary Features

Constellation Enhanced Antenna™

Integrated multi-function antenna joint Sanding iDatalink™ technology

Lean&GO internal IMU

Full metal jacket

Powerful long range radio modem, 3W, up to 8km

Durable standby internal battery

OLED to display real-time status, 7x24h working

All revolutionary updates from Vanguard

Stay stronger, stay smarter

The Pathfinder T28 uses every Sanding developer's wisdom onto this equipment. It's not only packed with the world-class GNSS mainboard, but built to withstand every challenging field. Sealed in metal housing, it has outstanding protection level and an extraordinary thermal dissipation.

Rover, base and static can be freely switched in seconds. WebUI can help to achieve cable-free operation in office or field. OLED screen ensures Pathfinder can work no matter day or night. Pathfinder has no doubt for your requests. It can reset to factory mode or self-check every interior part if issues happen.

Using Sanding's Constellation Enhanced Antenna™ design, the receiver can automatically track each and every satellite signal on-going for now and the future. All signal from satellites can't escape Pathfinder. Meanwhile, you don't even worry about multipath effect thanks to intelligent receiver it is.

Controller

X11 Lite
- Windows Mobile 6.5
- 1Ghz CPU, RAM 512
- ROM 8GB, SD expansion upto?32G
- Numeric Keyboard
- Weight 600g only
- 7.2V removable Li-ion, 3400mAh
- 3.7inch 480x680VGA, LED backlight
- MIL-STD-810G and Ip67
- OTG function

Additional Functions of X11 pro
- 72 channels GNSS chip
- AutoFocus 5MP camera
- Navigation update rate 4Hz
- WCDMA network module

Android solution package
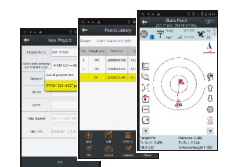
H3 Controller
- Android 4.4, 1.5G CPU
- 4.3" capacitive, sunlight screen
- 6500mAh, 10h duration
- Variable sensors, dual standby SIM
- 8 megapixel camera
- IP68

H3 Plus

SurvX software
- Modularized function management
- Predefine Coord. System for countries
- Clear S/O UI design
- Cloud technology embedded
- RTK and PPK

Surv X

Sanding Total Control

STC is a powerful office software developed by Sanding Geosystem research team. It can process PPK and static data in customized characters.

- Specially ability to process BDS
- Compatible with STH and Rinex2.x/3.x
- Self define processing parameter in 2D/3D
- Edit and filter satellite data for best result
- Export DXF/KML format for mapping