



AKT

HDT280

SPECIFICATION

Format	HDT280
Platform	Android 5.0
CPU	Freescale, 1GHz, Quad-core
Memory	RAM 4GB
	ROM 32GB
Display function	Display 10.1 inches 1000cd/m ²
	Resolution 1024×600
Compatible wireless standards	Electrostatic capacity type
	3G:W-CDMA 800/1700/2100
Wireless function	4G:LTE 700/800/1500/1700/2100
	IEEE 802.11b/g/n
Interface	V4.0+LE Dual mode
	LTE/3G, GNSS, Wifi, Bluetooth
Sound function	Keyboard (Power source, HOME, +, -, ENTER, BACK)
	USB (Type A) ports ×2 (front and rear)
Sensors	SIM card slot ×1
	MicroSDHC memory card ×2
Environment durability	RS232C port ×1
	RS422 ポート ×1
Operating temperature range	Ethernet board (PoE compatible) ×1
	NMEA2000 (CAN) port ×1
Power supply	GNSS external antenna port ×2 (built-in GNSS external antenna)
	3G/LTE external antenna port ×1 (switch with internal antenna)
External power supply range	Built-in speaker
	Built-in microphone
Battery capacity	GNSS (GPS/GLONASS/Beidou/SBAS/QZSS)
	GNSS capability consists of an LTE internal GNSS unit and 2 RTK GNSS modules
Battery running time	Acceleration sensor, Gyro sensor, Compass, Luminance sensor
	Case (black), Decorative panel (white)
Accessories	Size 351 (width) x 220 (height) x 76 (depth)
	Weight 2.7kg
	Conforms to IP67
	Vibration and shock resistance (conforms to MIL-STD810G)
	-15° ~ 55°
	External power supply or internal battery
	+10.8 ~ 36V, 5A
	5200mAh
	Approximately 3.5 hours (in power saving mode)
	Protective cover, Instruction booklet, Power cable

* Specifications and appearance are subject to change without notice.



H E A V Y D U T Y T E R M I N A L

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AKASAKATEC INC.

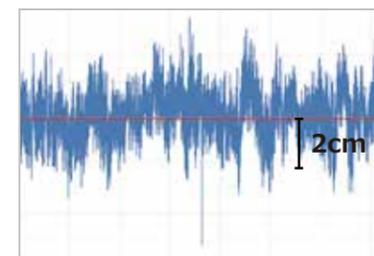
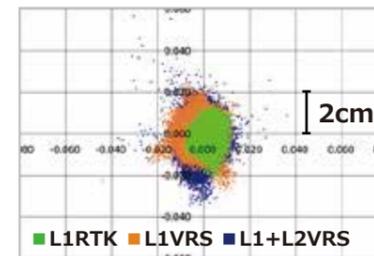


GNSS FUNCTION

Fitted with two high-precision L1-RTK GNSS modules that allow measurement with accuracy on the order of a few centimeters. Compatible with global navigation system satellites (GPS, GLONASS, Beidou, SBAS, QZSS)

The L1-RTK GNSS Rectifies Previous Shortcomings

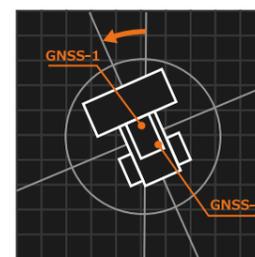
The current model improves the initialization time and recovery time from cycle slips, which were a problem previously with L1 position measurement. Compared to L1+L2 position measurement, it can be used as a high cost performance GNSS device. In addition, as there is an LTE module in the unit, it can be used by itself for network type RTK position measurement.



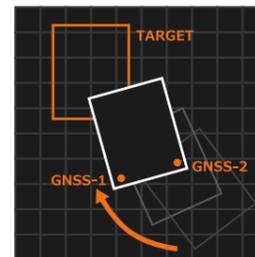
* The values shown are derived from Akasatec tests and do not constitute guarantees of performance.
 *1 10 times average HDT280: Base/Rover GPS+BeiDou 2 frequencies: Base-VRS/Rover-L2 GPS+GLONASS
 *2 L1RTK: GPS+BeiDou L1VRS: GPS+GLONASS L1+L2VRS
 *3 10 times average HDT280: Base-VRS/Rover-HDT GPS+GLONASS
 2 frequencies: Base-VRS/Rover-L2 GPS+GLONASS *4 L1RTK: GPS+BeiDou

W-GNSS Compass

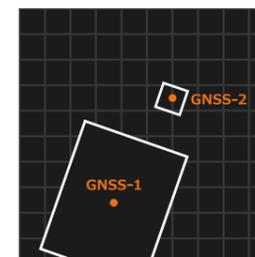
Thanks to its two GNSS modules/antennas, the HDT280 operates as a high-precision GNSS compass. Used on its own, the HDT280 can be utilized in a variety of situations, such as measurement of the progress of moving bodies, guiding of heavy machinery, work ships, etc., with positioning guidance, and measurement of the positions of the tips of cranes on special vessels such as crane barges.



Measurement of the direction and progress of moving bodies such as heavy machinery



Measurement of hull orientation during guidance of large work vessels



Current position of crane ships, coordinate management of crane tip

* The W-GNSS compass function is scheduled for release in 2017



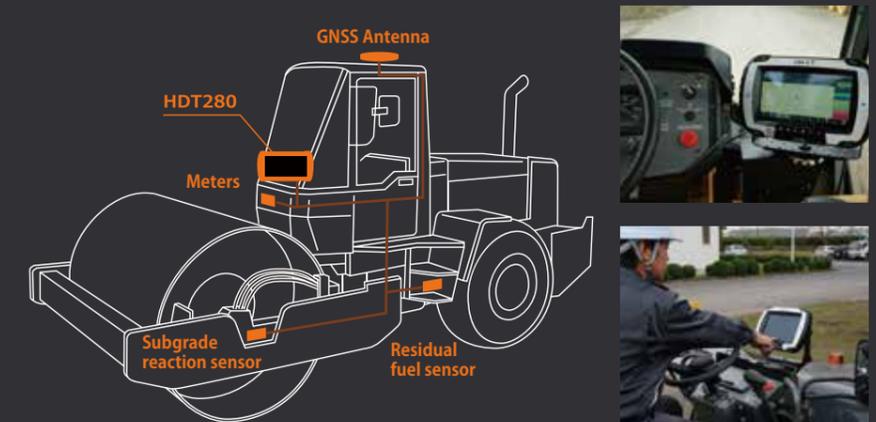
External GNSS antenna (image)

SENSOR NETWORK / CLOUD

The HDT280 was designed to be connectable to sensors, heavy machinery and manufacturing machinery as required in i-construction, and to cloud networks.

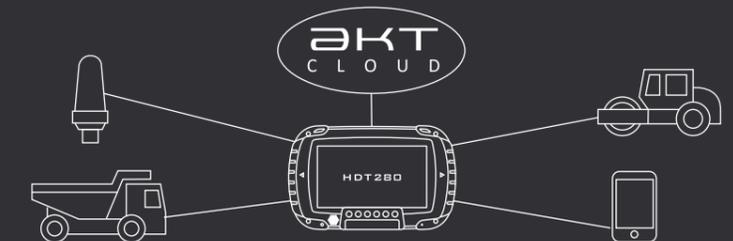
i-construction

In earthwork construction machine guidance and the measurement of 3D work progress data following compaction operations, high connectability to heavy machinery and operator friendly operation are required. With the HDT280, such functions can be built into or added later onto heavy machinery.



LTE Cloud Connection

A 5-band LTE module is fitted as standard, providing a constant cloud connection environment. LTE can use either the internal antenna or an external one, providing greater freedom when choosing an installation location. Equipped with a Wi-Fi (802.11 b/g/n)/Bluetooth 4.0+LE communications function, and, integrating all kinds of sensors and devices, it can be incorporated into a system as a high-performance central IoT central device.



AndroidOS / HARDWARE

The HDT280 is a durable multi-function terminal that comes with the Android OS. Fitted with a touch panel, it provides intuitive operation. It can run a wide variety of work site and business oriented applications, and through the use of original applications developed by the user, the HDT280 can be customized as a specialized device.

Because Android was originally developed for connection to networks and the Cloud, it is particularly suited to the construction of network type system applications.

Durability

Its durable design is well suited to the demanding environment of work sites.

The HDT280 is made for use as a highly reliable client terminal at locations in extreme environments, such as on construction and earthworks equipment, in manufacturing factories, warehouses, external structures and at sea. It conforms to the United States Department of Defense military standard (MIL-STD810G) for shock-proof and vibration-proof capability, as well as the IP67 waterproof standard, in addition to the salt water spray standard (ASTM B-117) in the case of use in marine and coastal environments.



Functionality Meeting the Needs of Work Sites

- LED lights and a high volume speaker (80 dB) for issuing warnings
- High brightness monitor made to be visible in outside light (1000 cd/m2)
- Can operate using a wide range of voltages (10.8 VDC – 36 VDC)
- Internal battery (3.5 hours operating time) provides reliable power supply



LED lights issue warnings (image)

