

NexusGEO Bluetooth Interface

A Bluetooth interface which can be used to connect a wide range of sensors with analogue or digital outputs to an Android smart device



NexusGEO Bluetooth Interface

Overview



The Geosense® NexusGEO is a Bluetooth Interface which can be used to connect a wide range of sensors with analogue or RS-485 digital outputs to an Android smart device. This means data can easily be accessed on site by any Android device such as a smartphone or tablet.

Specially-developed by Geosense, it is designed to offer interoperability between sensors and the chosen Android device. This enables the user to benefit from the increased processing capability and connectivity of a smart device over a standard readout.

The user can simply read and store data or read, store and transmit it via a mobile network.

The NexusGEO App makes it possible to download raw data or acquire calibration factors from the sensor which can then be used to convert the data into engineering units. All data can then be downloaded as a CSV file either locally onto the Android device or synchronised to a central database.

Colour-coded connections for the different analogue sensor types plus a simple digital connector makes the NexusGEO easy to use. It comes complete with battery charger and colour coded 'jumper cables' complete with crocodile clips.

The NexusGEO can be used on any Android device, such as the affordable rugged Cedar™ CT5 Handheld and CT7G Tablet which are available from Geosense, see over for full specification.

APPLICATIONS

Bluetooth Interface for use with :

Piezometers

In-Place Inclinometers

Tilt Meters & Tilt Beams

Strain gauges

Rod extensometers

Settlement systems

Joint Meters & Crack Meters

Pressure cells & NATM cells

Load cells

Thermistors & Thermocouples

FEATURES

Android compatible

Bluetooth technology

Multiple sensor inputs

Auto calibration factors upload

Purpose-designed APP

Small & lightweight

Easy to use

Re-chargeable battery

Displays battery status

Fully CE compliant

NexusGEO Bluetooth Interface

Specifications

GENERAL

Signal inputs	VW (Hz), mA, V, mV/V, Pt100, NTC, RS-485
Range	VW Hz 400-5000 mA 4-20 V Single ended 0-100 V Differential 0-10 mV/V Singled ended 0-20 mV/V Differential 0-1000 Pt100 Ω 15-400 NTC Ω 250-50,000
Power supply	Internal 12Vdc Ni-Mh battery, rechargeable
Sensor supply	+20V, +12V, +5V, 750uA, 50uA
Current supply@12V	100mA @ 4-20mA, no load 85mA @ +20V single, no load 70mA @ +12V dual, no load 60mA @ mV/V dual, no load 72mA @ Pt100, 100 Ω load 55mA @ NTC, 3K Ω load 60mA @ VW, 777.1Hz 15mA @ no Bluetooth connection
Measurement resolution	24 bit, 0.1Hz for VW
Display	Android device
Sensor connection	Analogue (4mm socket), Digital RS-485
Temperature stability	+15ppm/°C maximum
Operating temperature	-20 to +70 °C
Enclosure	IP65
Dimensions L x B x H	150 x 105 x 35mm
Weight	465g

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Rugged Handheld & Tablet



APPLICATIONS

Rugged Android smartphone and tablet - ideal for all site work

Use with the NexusGEO Bluetooth Interface

FEATURES

Enhanced Outdoor Display Readability

All-Day Battery Life

Reasonably priced

Highly Versatile Android OS

The Cedar™ CT5 Rugged Handheld and CT7G Tablet by Juniper Systems are ideal for using with the new NexusGEO Bluetooth Interface. Both are IP68-rated for protection against dust and water, and are built to withstand accidental drops from up to three feet onto concrete, making them the sensible option for site work.

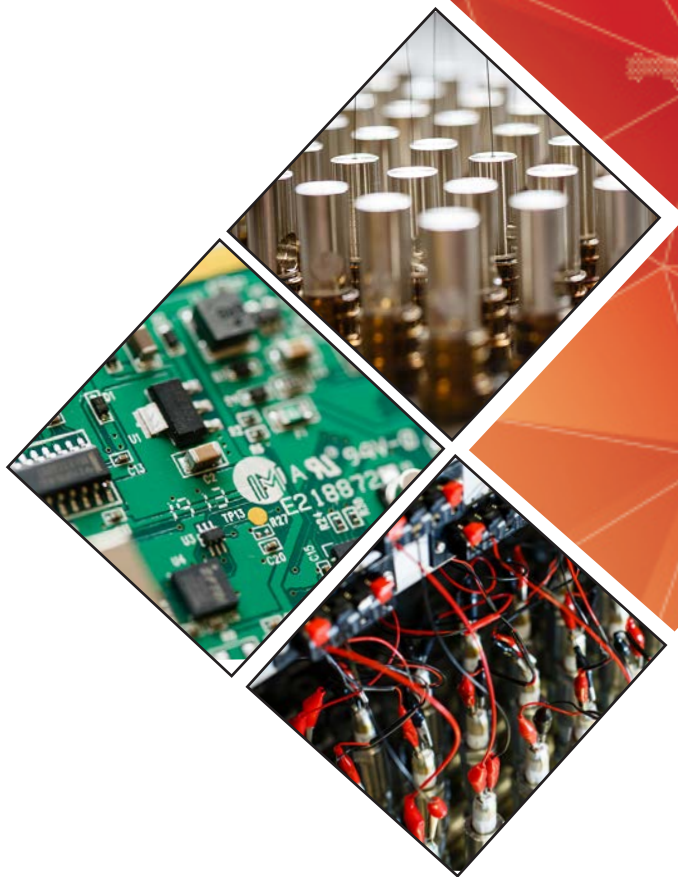
They provide affordable durability with an Android® 6.0 operating system, fast powerful processing capabilities, a long battery life and large memory. Compact and lightweight, the CT5 is designed for all-terrain data collection and communication. The CT7G is great for outdoor visibility with a large 7-inch display. Both are available from Geosense.



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CT5 & CT7G Specifications

MODEL	CT5	CT7G
SYSTEM		
Operating System	Android 6.0	Android 6.0
Processor	MTK6755Octa-core2.0GH	MediaTek MT673564-bitquad-cor
CONNECTIVITY		
	4G LTE, Dual Micro SIM Card Slots	4G LTE, Dual Micro SIM Card Slots
	Wi-Fi®:IEEE802.11a/b/g/n	Wi-Fi®:IEEE802.11a/b/g/n
	Bluetooth® 4.1	Bluetooth® 4.1
	GPS+GLONASS	USB Disk
	FM Radio	FM Radio
	Near-Field Communication	Near-Field Communication
PHYSICAL		
Weight (inc battery)	225 g	590 g
Dimensions	152.3 x 81 x 1 6.6mm	215.56 x 135.8 x 18.9mm
PORTS		
	AC Adapter110~240V, Micro USB	Micro USB, 3.5mm audio jack, USB OTG
BATTERY		
	Li-Polymer 4500mAh	Li-Ion 7000mAh
DISPLAY		
	High-visibility HDIPS display	High-visibility HDIPS display
Screen Size	4.7"(119mm) Resolution: 720 x 1280	7"(178mm) Resolution: 800 x 1280
Screen Orientation	Portrait	Auto rotate
STORAGE		
Memory (RAM)	3GB	2GB
Storage	Internal 32GB	Internal 16GB, Micro SD card: up to 32G
RUGGEDNESS		
Protection	IP68 waterproof & dustproof	IP68 waterproof & dustproof
Shock/Drop	Up to 3'(0.91m) onto concrete	Up to 3'(0.91m) onto concrete
Operating Temperature	-15°C to 55°C	-15°C to 55°C
CAMERA		
	Front: 5MP Rear: 13MP	Front: 2MP Rear: 13MP
TOUCH SCREEN		
	Capacitive	Capacitive



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