

Leica GS20 PDM The Mapping Tool of Tomorrow



- when it has to be **right**

Leica
Geosystems

Feel The Power

The GS20 Professional Data Mapper (PDM) from Leica Geosystems is the most advanced handheld GPS for GIS and mapping.

Powerful Features

Now there's an even better way to collect and maintain data in the field. Leica's GS20 PDM puts an entire GPS data collection system in the palm of your hand. For field personnel, this rugged and highly portable device offers all the features needed to collect on-the-spot GIS data anywhere, anytime, accurately:

- Powerful GPS technology offering unmatched accuracy
- User-friendly interface and ergonomic design
- Cable-free operation with **Bluetooth®** wireless technology
- DGPS and High Precision upgrade ability
- Satellite-based augmentation systems (SBAS) like WAAS and EGNOS
- Realtime Network access via **Bluetooth®** cell phone

Powerful Functionality

The GS20 PDM combines the all-in-one simplicity of a recreational GPS with the power and flexibility of a professional grade mapping system. Providing you with a true turn-key GPS mapping solution, the GS20 PDM is a GPS receiver, antenna, and data collector, all in an ergonomic handheld. With the GS20 PDM, powerful functionality doesn't mean difficult to use. The menu-driven interface and graphical map display make it easy to learn so field crews can start collecting data right away. Add to this the wireless connectivity to PCs, and mobile accessories provided by

Bluetooth® technology, and you begin to understand what we mean when we say the GS20 PDM is the mapping tool of tomorrow.

And A Powerful Promise

You know you are getting an industry-leading technology solution because the GS20 PDM comes from Leica Geosystems. Known throughout the world for precision and accuracy, the people at Leica Geosystems have been delivering on the promise of technology excellence for more than a century.

Unexpectedly Simple To Use

Effortless data collection and asset management. The GS20 PDM puts it all in the palm of your hand. No complicated set-up, no special training; the GS20 PDM is a true out-of-the-box GPS solution. The benefits for the user are:

Wireless

Built-in **Bluetooth®** links with DGPS sources and external devices. In the office, use the USB **Bluetooth®** module to download to your PC.

Superior GPS

Leica Geosystems' advanced GPS technology offers unmatched GPS reception in a handheld device.

All-in-one

All-in-one handheld design for professional data collection with zero setup.

Keypad

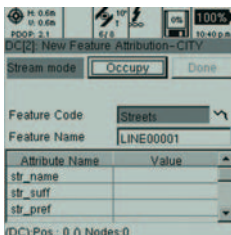
Cell phone style keypad for easy data entry.



Enjoy the freedom

GIS Data Collection Just Got Easier

The GS20 PDM handheld GPS mapping device features an intuitive interface with a familiar look and feel. Driven by intelligent context menus, the interface also provides easy-to-read graphical map displays and even allows for multi-tasking using innovative PowerPage functionality.



Intuitive menus speed data collection



Edit feature geometry while on site with data management tools



Find field assets easily with the GS20 PDM's navigation functions

Quality Monitor

Use the Coordinate Quality Monitor to measure GPS precision in the field and ensure data quality before you get back to the office.

Geo Clipboard

The Geo Clipboard makes it possible to easily copy, cut and paste features and nodes, allowing separate features to share common nodes and multiple offsets from a single location.

Screen

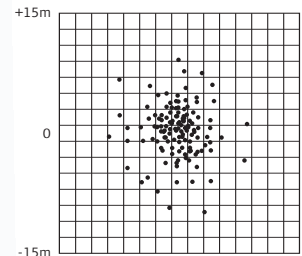
High-resolution high-contrast screen ensures outdoor readability under any conditions.

PowerPage

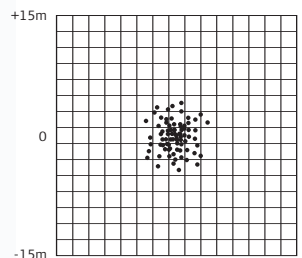
Streamline fieldwork using the PowerPage functionality to switch instantly between user-selected applications and menus.

Unparalleled Accuracy From A GPS Handheld

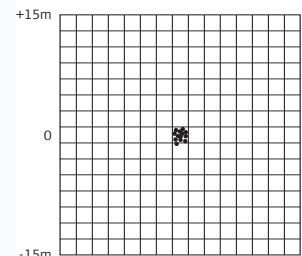
Leica Geosystems' revolutionary GS20 PDM is the first and only GPS handheld using proven correction technologies to provide sub-meter accuracy. Using either real-time corrections or post-processing, the GS20 PDM makes it possible to collect sub-meter data without a backpack.



Recreational GPS



Competitive handheld devices



Leica GS20 PDM

The right tool

Specifications	GS20
Size	21.5 cm L x 9 cm W x 5cm D: 8.46" x 3.54" x 1.97"
Weight (With Battery)	0.652 kg or 1 lb 7 oz
Power	2.1 Watt (typical) at 20°C, 7.2V internal, 12 V external
Receiver	12 channel parallel automatic selection. L1 Code / Phase
Antenna	Internal: Leica AT575 microstrip, built-in groundplane External: Leica AT501 microstrip, built-in groundplane
Display,	240 x 240 pixel graphical LCD, 16 grayscale with backlight
Internal Radio	Bluetooth®
Memory	ATA compact flash: Standard 32 MB; Max 2 GB
Data Transfer	Triple redundancy: Bluetooth® cable free transfer, RS232 lemo, ATA compact flash
Internal Ports	RS232 Serial: 7 pin Lemo; Antenna Coaxial Lemo
Operating Temperature	-20°C to 55°C / -4°F to 122°F
Shock	1.2 m drop
Baseline rms (Post-processing)*	L1 Code only: Typically 30 cm (rms) L1 Code and Phase typically 5 o 10 mm + 2 ppm (rms)
DGPS/RTCM SBAS	RTCM version 2.1, 2.2, 2.3 (9.2 & 1.2 & 18.19 & 20.21) CMR Leica Standard support for Coast Guard Beacon and Satellite Based Augmentation Systems like WAAS and EGNOS
Baseline rms (DGPS/RTCM)*	L1 Code only: Typically 40 cm (rms)
Data Recording Rate and Capacity	At 1Hz measurement; 1 hour runtime = 2 MB, 16 hours continuous measurement per 32 MB standard compact flash
Desktop Software	GIS DataPro™; Native shapefile format, L1 code/phase post proces sing, ASCII export, import and export to dwg, dxf, dgn and mif
Application	Data Collection, Data Management, Navigation, File Browser

*Baseline rms refers to accuracy in position. Accuracy in height is 2 x accuracy in position.
Figures are for normal to favorable conditions.

Standard Configurations
Each GS20 PDM is packaged in it's industrial-strength storage and travel case, and delivered assembled and ready for use.
GS20 PDM Stand-Alone
Small storage and travel case
GS20 PDM handheld GPS receiver
GS20 PDM holster case
Li-Ion batteries, 7.2 V (1 spare)
Battery Charger
PC USB Bluetooth® module
Data transfer cable, GS20 PDM to RS232
GIS DataPro™ software CD
Set of documentation
High Precision
When bundling the GS20 PDM with the High Precision package add the following:
Large storage and travel case (replaces small case)
High precision GPS antenna
Telescopic rod with 5/8" adapter
Backpack-free antenna sash
Antenna cable, GS20 PDM to external antenna



GS20 PDM High Precision

GS20 PDM Stand-Alone

Do it all

Create Your Own Flexible System

Don't let the small size fool you. The GS20 PDM represents a technologically advanced GPS platform for GIS and mapping. Depending on your needs and applications, you can expand your functionality anytime by simply connecting the GS20 PDM to a variety of external devices via **Bluetooth®** or serial interface.

Connect your **Bluetooth®** cellphone with the GS20 PDM and dial into a reference net to get submeter accurate positions.

Increase Your Capabilities With A High Precision Upgrade

Do you require the utmost in precision? Do you need to collect data in harsh GPS environments like dense foliage or urban canyons? Do you need centimeter level post-processing? The High Precision external package provides demanding users a premium grade external antenna for increased reception and greater multi-path rejection. The High Precision kit includes:

- Leica Survey grade L1 C/A code and phase antenna
- Leica Antenna Sash: Backpack free, light weight, breathable antenna mount
- Leica Telescopic Rod: Three sectioned, twist tightened, sash mounted antenna pole



Whether you want to map the location of a power pole, the run of a pipeline, the area of a building or a farm; whether you are downtown or out in the country; whether you want to collect new features, or update and maintain the data from your Enterprise or Geographic Information System: For collecting, verifying and updating geographic data or an as-built of civil infrastructure models, Leica Geosystems offers the right solution – with seamless data exchange between field and office, for GIS or CAD workflow.

When the data really counts, Leica Geosystems offers the right combination of hardware and software: Field-proven sensors use up-to-date technologies including terrestrial and satellite data collection and navigation, distance measurement devices, scanners and airborne sensors. Our wide range of software solutions for field and office usage is compatible, scalable and flexible, with the accuracy and reliability that you need.

When it has to be right.

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**Total Quality Management –
Our commitment to total
customer satisfaction**

Ask our local Leica Geosystems dealer for more information about our TQM program.

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Leica SR20
Product brochure