Geotracer®

Dual Frequency

Geotracer® Dual Frequency GPS Receiver built on Z-tracking™ technology

Receivers

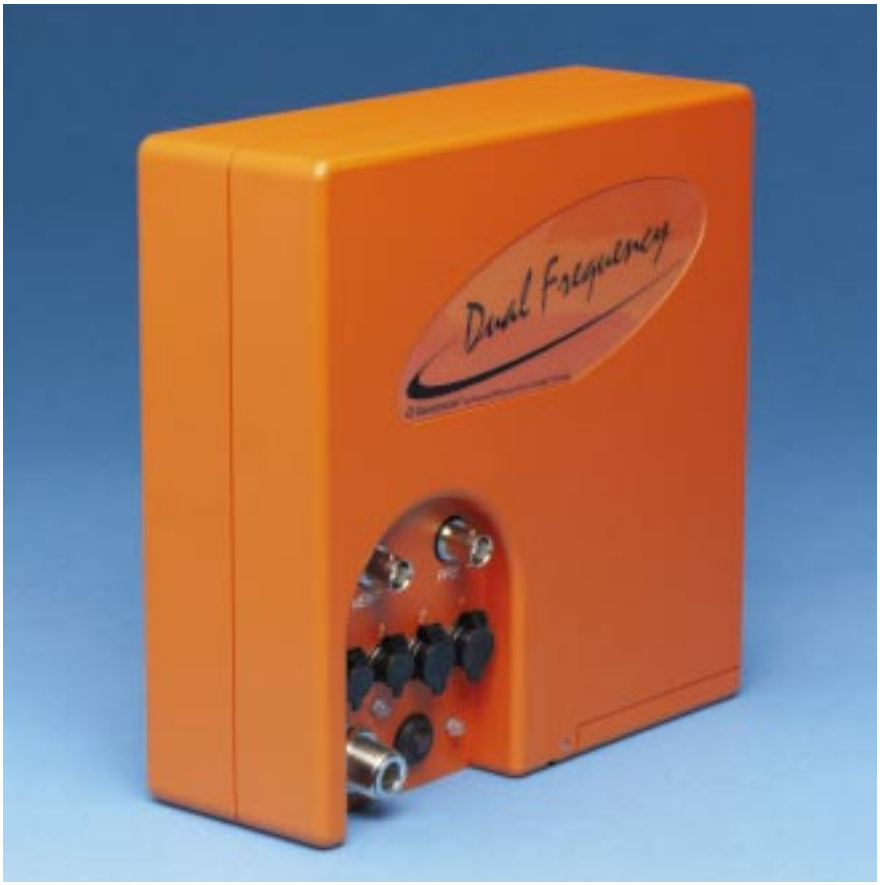
Built on Z-Tracking™ technology

Geotracer® GPS Dual Frequency RTK receivers are just as efficient for setting out and collecting detail (topo) work as the Geodimeter System 600 Total Stations.

In fact, the way surveying is carried out is practically the same. You won't find a faster and more comfortable way of surveying.

As soon as you have initialized the reference station and the rover, the system is ready for setting out or topo work and you only need to move from point to point with the rover.

Thanks to a graphical presentation on the control unit's screen of your position in relation to the point of reference and the point to be set out, work becomes easy and efficient. You put the rod on the point and measure. The control unit prompts you to enter data, in the order and sequence you wish. You have full control of data entry whilst standing at the survey point.



All the Geotracer receivers feature automatic recording of data on removable PCMCIA cards, which means easy transfer of measurement data to and from your PC, but more important it means that you can transfer data into your Geodimeter total station whenever the conditions become difficult for GPS and more suitable for Total Stations - or vice versa. The two worlds of surveying have been integrated into one.
– The world of *Integrated Surveying*™.

Geotracer®

Dual Frequency Receiver:

Technical Specifications

Static Surveying

L1, C/A Code and full cycle carrier
L1, P Code/Z-Tracking™ and full cycle carrier
L2, P Code/Z-Tracking™ and full cycle carrier

Modes Quick-start, Scheduled, Short Static, (Fast/Rapid Static), Base Station or Rover Station

Kinematic Surveying

L1, C/A Code and full cycle carrier
L1, P Code/Z-Tracking™ and full cycle carrier
L2, P Code/Z-Tracking™ and full cycle carrier

Modes Standard: External Real Time Kinematic
Continuous Kinematic
Stop & Go
GIS (DGPS)
Optional: On-board RTK

Accuracy

Static Survey

Horizontal 5 mm + 1 ppm (rms)*(times baseline length*)

Vertical 5-10 mm + 1ppm (rms) *(times baseline length)*

Azimuth 1 arc second + 5/baseline length in kilometres. Assumes 5 satellites (min.) tracked continuously for the recommended occupation time utilising the L1 signal at all sites, antenna orientation not required

Short Static 5 – 10 mm + 1 ppm *(depending on observation time)*

Kinematic/RTK 10 – 20 mm + 2 ppm *(depending on observation time)*

GIS/DGPS < 1 metre + 1 ppm (PDOP <4)

Tracking 12 Digital channels L1, L2. Full cycle carrier on L2 using Z-Tracking™ technology if P-code is encrypted.

Start-up Cold start <2 min. from power on to survey start. Warm start typically <30 sec

Data logging Static, Kinematic, GIS survey data logging, 0.5 sec to 15 min; (Option 0.1 sec.)

Data Storage On board. Dual type 2 PCMCIA card socket supporting. ATA Flash disk. Optional logging to PC.

Physical characteristics

Size 200 x 205 x 70 mm (8 x 8 x $2^{3/4}$ inch)

Weight Receiver 1.95 kg (4.3 lbs)

Operating temp. -20°C to + 55°C

Storage temp. -30°C to + 75°C

Power Quadruple inputs with independent power control. Automatic switching between power sources for UPS functionality.
Direct input for DC operation.
Uses standard Spectra Precision batteries, or external source at 10.5 - 15V, (10-30V or 100-240 V AC with SpectraPrecision power supply 571 906 145 and 571 906 146.

Consumption 10 Watts.

Communication Four RS-232 ports. (Two with h/w handshake.) 300-115.000 Baud. 1PPS output. Event marker.

Data Download Immediate transfer in PC or Card Reader.
Transfer via RS-232.

On-Board Software Standard: Static or kinematic survey data recording. Data output in Spectra Precision standard formats (Geodimeter® Geotracer® Geo-L) NMEA Output, RTCM input/output. DGPS calculations.
Option: RTK Base Station output, RTK calculations.

Antennas

Geodetic Antenna
Ø 365 mm (14 3/8 inch)
Height: 110 mm
Weight: 1.3kg (2.9 lbs)

Geodetic Antenna

Choke Ring Antenna
Ø 365 mm (14 3/8 inch)
Height: 70 mm
Weight: 4.0kg (8.8 lbs)

Choke Ring Antenna

Compact Antenna
Ø 138 mm /5 1/2 inch)
Height: 85 mm
Weight: 0.6kg (1.3 lbs)

Compact Antenna

Geotronics is now
SPECTRA™ PRECISION

ISO 9001 Spectra Precision AB Certificate No. 254

Spectra Precision AB, Box 64
SE-182 11 Danderyd, Sweden
Tel +46-8-6221000
Fax +46-8-753 24 64
E-mail: info@geotronics.se
Internet: http://www.spectraprecision.com