

GeoCable[®] GIS

Frequently Asked Questions

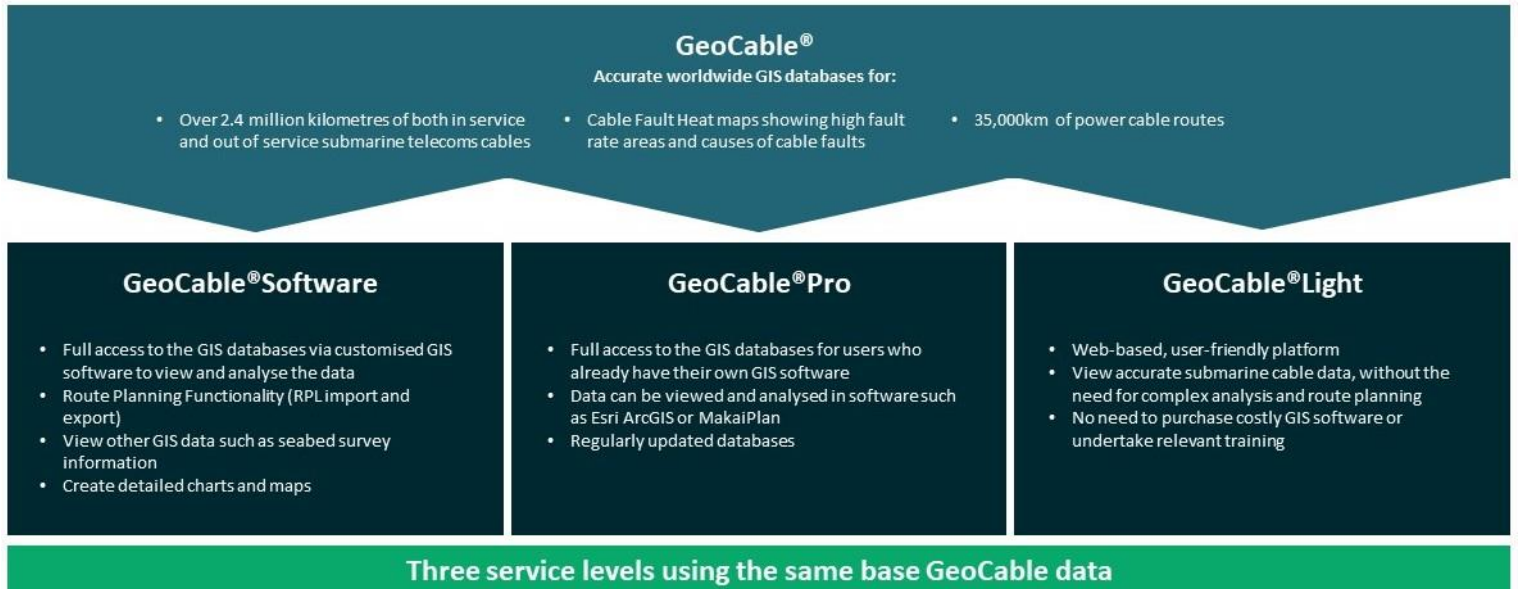


OceanIQ

GLOBAL MARINE | GROUP

What is GeoCable®?

GeoCable® consists of three service levels allowing access to a comprehensive worldwide database of submarine cable locations coupled with an industry specific Geographical Information System (GIS) package for the viewing and analysis of submarine cable routes and associated data. It is used extensively by installers, maintainers, surveyors, and planners within many industries involved with subsea infrastructure projects.



What information do the GeoCable® databases include?

The database contains approximately 97% of the world's cable systems which equates to over 2.6 million kilometres of cable route. The cable types included are:

- › In service fibre optic
- › Out of service fibre optic
- › Out of service coaxial
- › Out of service telegraph cables

Information on the cable name installation year, out of service year (where appropriate) and system type are held against the different cable types.

How accurate is the data in the databases?

Approximately 80% of routes are plotted using as-laid coordinates. Where we don't have as laid coordinates, we utilise other sources such as vessel positions and cable awareness data. Routes not based on as laid data are clearly marked in the database.

GeoCable®Light

What is GeoCable®Light?

GeoCable®Light allows users to view cable locations in a secure online environment. The database has exactly the same detail as is used in the other service levels, however, the end user is limited to viewing and basic analysis of the data. The databases cannot be used in any other software. Geocable®Light is based on ESRI web mapping software and has a full range of base maps available such as satellite imagery and street maps.

Can I find a specific location in GeoCable®Light?

Yes, users can key in a latitude and longitude to add a point on to the screen.

Can I measure distances in GeoCable®Light?

Yes, full measurement of distances and areas is available

Do I need software to use GeoCable®Light?

No. GeoCable light is a web based geographical information system (GIS) and no software is required to use it other than access to a web browser

Can I plan new routes and create route positions lists (RPLs) in GeoCable®light?

No. Geocable®light is designed for basic viewing of cable locations. Cable planning and RPL creation is available within the GeoCable®Software service level

Can I export data from GeoCable®light?

No Geocable light is designed for viewing only

Is the database worldwide within GeoCable®light?

Yes. The database can either be for the entire world or for one or more of four regions. The four regions are:

- › West Pacific
- › Atlantic
- › Africa & Eurasia
- › East Pacific

GeoCable®Pro

What is GeoCable®Pro?

GeoCable®Pro allows for the use of our databases within your own GIS software. The data can be imported into existing software such as Makai Plan or ArcGIS.

What format can the data be provided in?

The data is available in ESRI Shapefile format and Geomedia .mdb format.

How often is the data updated?

We have a team of people constantly updating the databases. We log all changes and issue an update to subscribed members every 3 months.

Do I have to subscribe to a world dataset?

No. The databases are available as regional areas. You can mix and match these areas to suit your requirements. The areas available are:

- › NW Europe
- › Atlantic
- › Caribbean
- › Mediterranean
- › Indian Ocean
- › East Asia
- › Pacific

Can I perform analysis on the data and plan new cable routes?

Yes, depending on the software you use to view the data you will be able to fully analyse the cable data. Route panning functions are dependent on the software you use.

GeoCable®Software

What is GeoCable®Software?

GeoCable®Software provides a full viewing and analysis package for accessing our cable databases. The software uses an off the shelf GIS package as the base with customised applications sitting on top of this that are focused on the needs of the cable industry

What is the base software?

GeoCable®Software is built on top of an off the shelf GIS called GeoMedia. GeoMedia is provided by Hexagon who are a global leader in sensor, software and autonomous solutions. A full copy of GeoMedia essentials is provided with each licence of GeoCable®Software. Please visit the following link for more information on the base software: <https://www.hexagongeospatial.com/products/power-portfolio/geomedia>

I already have my own GIS and just need access to the cable database, do I have to buy the GeoCable®Software?

No. Our GeoCable®Pro service level allows access to the data in your own GIS software.

Can I easily plot a position, measure a distance etc.?

Yes. The software has a full suite of coordinate control functions such as measuring distances, plotting, and reading out coordinates as well as the ability to view the data in whatever datum and projection you require.

Can I plan new cable routes using GeoCable®?

Yes. There is a dedicated route planning module within GeoCable®. Routes can be easily created and refined on screen taking advantage of the ability to overlay lots of different marine datasets that may affect your route. The routes can then be exported to Excel format RPLs. Crossing positions with existing cable routes are automatically calculated and added to your RPL. You can also save your route to a Google Earth KML file.

Does GeoCable® import Route Positions Lists (RPLs)?

Yes. GeoCable® will import existing RPLs from a variety of formats of RPL. The routes can then be edited if need be and re-exported to reflect the changes or to include cable crossing locations.

My company only works in a specific region of the world, do I have to sign up to the worldwide database?

No, the database is split into the following geographic regions, you can pick and mix the data that you require. Please [contact us](#) if you require a more specific area. We collaborate with you to understand your precise data requirements and can adjust accordingly in order for you to purchase data that meets your exact requirements.

- › NW Europe
- › Atlantic
- › Caribbean
- › Mediterranean
- › Indian Ocean
- › East Asia
- › Pacific

Can I create presentation quality maps and charts within GeoCable®?

Yes. The software allows the production of high quality maps and charts via the layout window command. This allows the creation of map borders, titles, grids, scale bars, legends and more. Customisable templates can also be created to streamline workflows.

Can I view KML/KMZ files within GeoCable®?

Yes. GeoCable® easily connects to Google Earth KML and KMZ files. Data can also be exported from the software to KML format.

I have a lot of data in ESRI shapefile format, can I view this in GeoCable®?

Yes. One of the great things about GeoCable® is that it will easily connect to nearly all other GIS format data. Shapefile format is very commonly used within GeoCable®.

Is there any training available?

The software includes installation and training guides. We are also happy to provide on-site or remote training to meet your needs.

Are there any other databases available for use within GeoCable®?

Yes. We can supply maritime boundaries, global wrecks, bathymetry, power cables and cable fault density heat maps. Please [contact us](#) if you have any specific requirements for additional data.

I have a list of coordinates in Excel/text file/Word/PDF. Can these be imported and viewed as a map layer?

Yes. There is a powerful tool included “Geocode Coordinates” that allows you to connect to Excel and text files. So as long as you have a latitude and longitude within the file the data can be imported and plotted on screen. All other columns within the data will be imported as attributes and are visible when interrogating the point or line. The Excel file can be updated/added to, and the changes will be automatically reflected on the map.

Can I view hydrographic charts in GeoCable®?

Yes. UKHO hydrographic charts (ARCS) are available for use within the system. There are over 3,000 charts available covering all world regions. Charts are updated weekly and can either be downloaded for use offline

or can be connected to via secure cloud storage. NOAA BSB charts can also be viewed within GeoCable® as geotif files.

Can I connect to my own GIS data within GeoCable®?

Yes. If you have your own GIS data or data provided by 3rd parties such as survey data then GeoCable® will read it.

I have existing GIS data in lots of different map projections and datums, can I view this in GeoCable®?

Yes. GeoCable® is excellent at instantly converting GIS data from lots of different sources and projections/datums. The data is easily viewed within a single map projection such as Mercator WGS84 or any UTM zone.

Am I able to create my own GIS databases, e.g. cable fault locations, survey bathymetry, etc?

Yes. Bespoke databases can be created within the software or by connecting to Excel and text files. So long as there is a latitude and longitude within your data it can be imported.

Does GeoCable® data work in MakaiPlan?

Yes. MakaiPlan software also uses GeoMedia as the base software. Data from GeoCable® will open directly into MakaiPlan.

Can I change the coordinate system (map projection and datum)?

Yes. GeoCable® can view data in many different projections and datums. The data is re-projected within the software to be viewed on whatever setting the user requires.

If I hold bathymetry GIS data, can I create a route profile?

Yes. During the export to RPL process you can select the option to create a route. This is then output to an excel graph as a distance along the route versus water depth profile.

Can I load WMS or WFS services from other data suppliers?

Yes, GeoCable® connects directly to both WMS and WFS data services.

Are there different levels of functionality available within the software?

GeoCable® is supplied as standard with GeoMedia Essentials GIS which provides powerful viewing analysis and standard editing functions. This suits the needs of the majority of customers. There are two further levels of the base GeoMedia software, Advantage and Professional. GeoCable® runs equally well on both of these and may be of interest to more advanced GIS users. Details of the additional functionality can be found here:

<https://www.hexagongeospatial.com/products/power-portfolio/geomedia>

What are the recommended PC/laptop specifications for GeoCable®?

GeoCable® is not particularly resource hungry. A modern specification laptop with Windows 10 should run the software easily. Recommended spec is:

- › Computer/ Processor - 64-bit: Intel 64 (EM64T), AMD 64, or equivalent
- › Memory (RAM) - 4 GB minimum, 8 GB recommended
- › Disk Space - 10 GB for software. Data storage requirements vary by project
- › Operating Systems - Windows® 10 Professional (64-bit)