Ice map ™ ice B Sea RiDge T Hikness D detection R Adar

Continuous, real-time ice thickness measurements to ensure safety on winter ice roads.

Technical Features:

◇Can detect ice thickness less than 10m

◇ Radio control of laptop antenna unit: Transfer collected data to laptop computer in real time

◇The antenna can be dragged by mechanical vehicles by moving at high speeds: up to 80km/h

◇Monitoring and recording of small and large thicknesses

◇Ice hazardous area warning function: Can be achieved by setting a valve with the thickness of the ice.

◇Continuously recorded GPS information allows you to accurately determine offline frozen hazardous areas maps on Google Earth

◇ Data playback display function, easy access to check

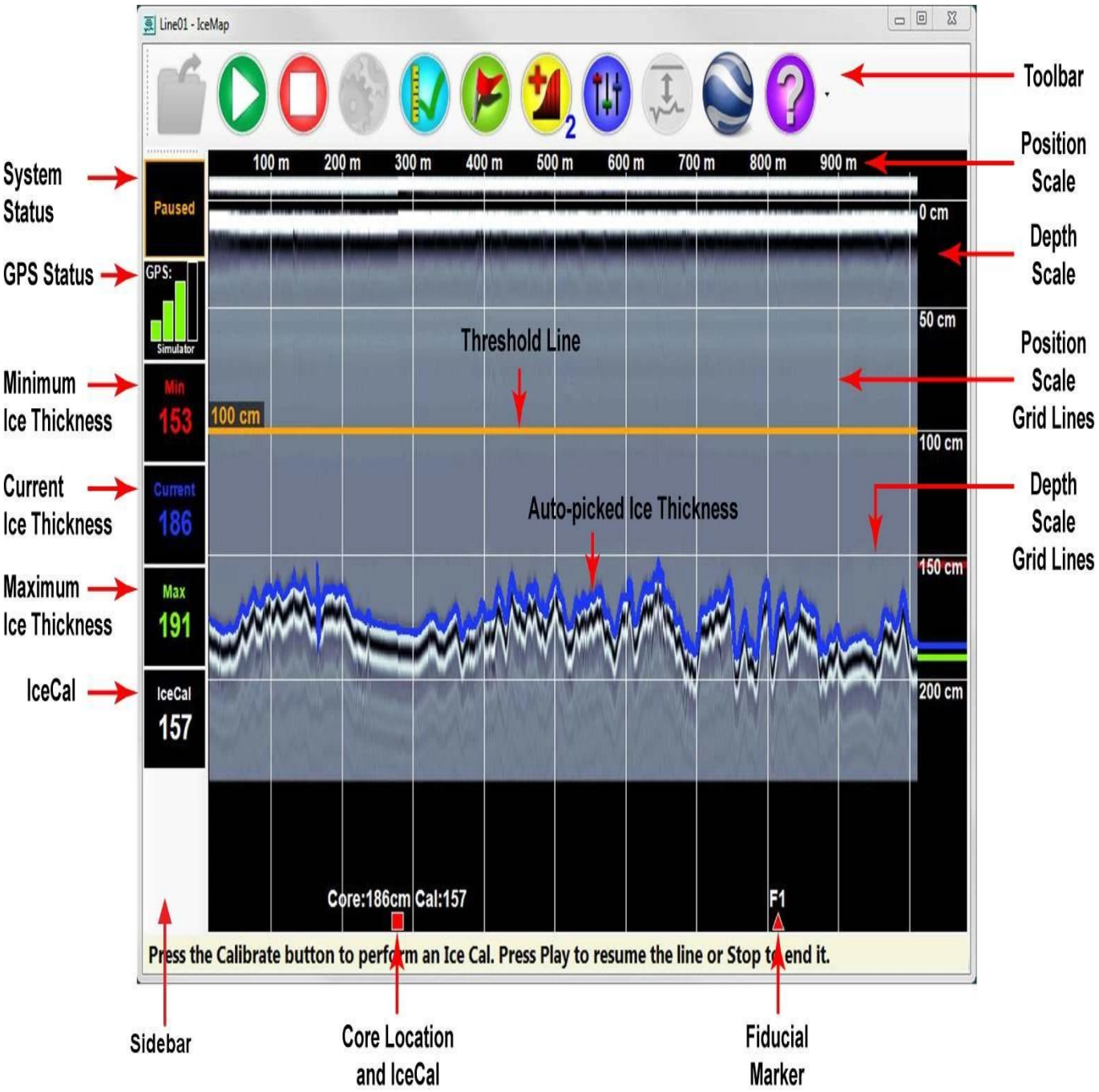
Real-time ice thickness measurement

of Underground radar The IceMap™ Real-Time Display displays the automatically detected bottom of ice (blue lines) in real time. Users can set a minimum thickness warning threshold (gold wire).

IceMap™ From thickness data for ice bridges in Alberta, Canada.

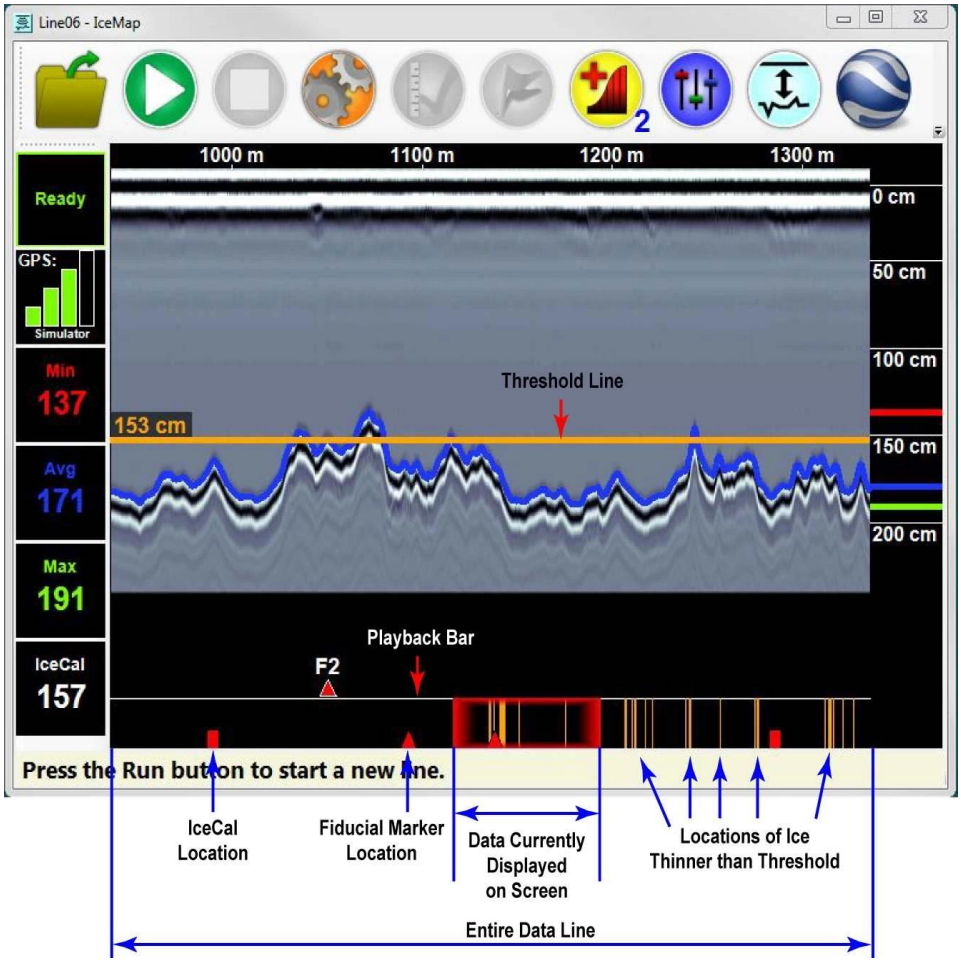
IceMap™ Data Collection Software

To collect IceMap™ data, users simply set the desired vehicle speed (km/h or mph), scan depth, and step size (measurement interval). All other parameters are automatically optimized for the highest quality data.



Data Review

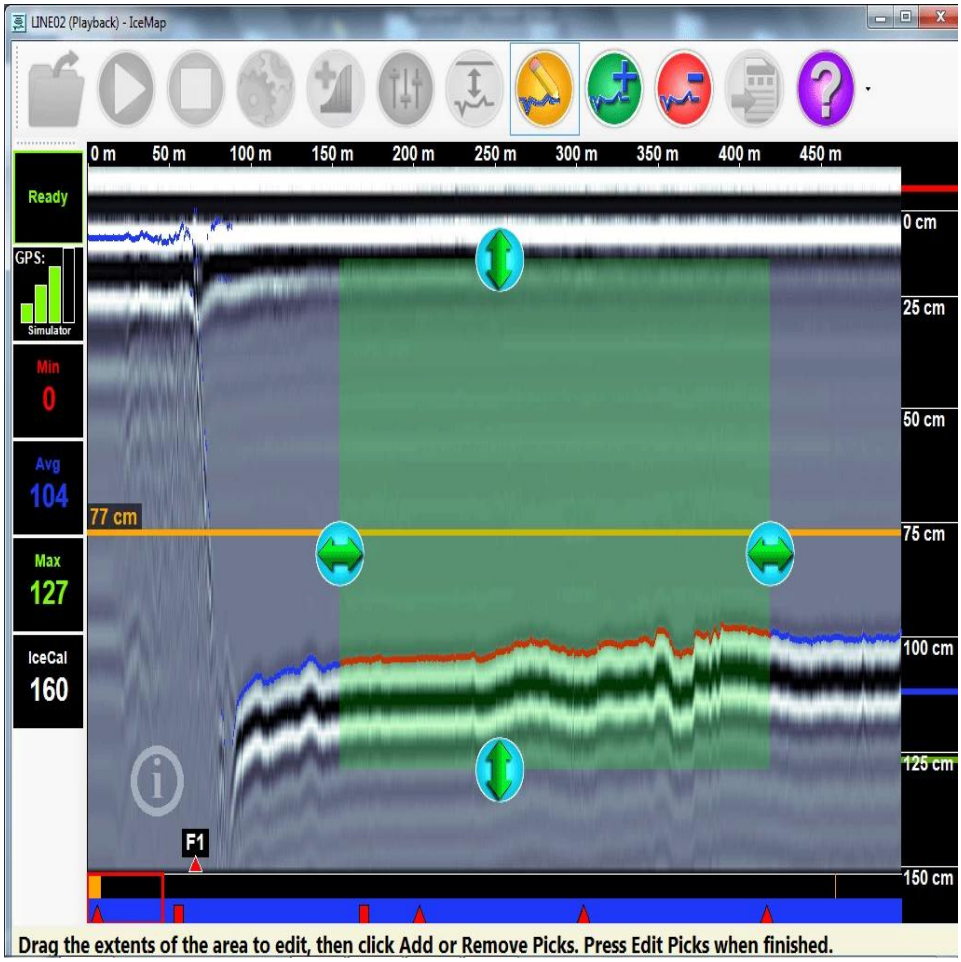
After collecting IceMap™ data, the playback bar plots an area where ice is thinner than the threshold (orange line). Quickly identify where the problematic area is.



Data Edit

After collecting IceMap™ data, operators can edit it by clicking the button on the toolbar.

1. The user drags the edge of the box on the touchscreen to define the area to delete or repick a pick.



Ice thickness report

Reports in PDF format are generated quickly from IceMap™ data.

l. Users can define survey names, starting and ending locations, and additional comments.

m. The Ice Calibration overview lists the IceCals that were run. Their location and measured ice thickness

n. The thinnest ice section table, including the full length and longest continuous portion of thin ice.

o. The exception table plots the area where the picks were manually deleted. These areas may indicate that the ice has been broken

p. Map view view of IceMap™ lines

q. Schematic cross-section of IceMap™ Line Ice Thickness

r. Detailed cross-sections for every 1000 meters of IceMap™ line

specification :

specification	values
electronics	Size: 78 x 53 x 38cm (31 x 21 x 15 inches) Weight: 30 kg (65 lbs)
toboggan	Size: 191 x 79 x 30cm (75 x 31 x 12 inches) Weight without tow hitch: 16kg (36 lbs) Weight including tow hitch: 20kg (45 lbs)
Center frequency	500MHz
-3dB Bandwidth	250-750MHz
Maximum depth setting	10 meters (33 feet)
Data output	Digital (raw) 16-bit 2's complement
Acquisition rate	Up to 100,000 samples per second
Maximum towing speed	80 km/h (50 mph)
Operation mode	Free run and odometer at constant speed
force	8 watts, 0.7 amps @ 12 volts
Performance Factor	160dB10log $_{10}$ N Example: 193 dB for 2048 stack
Dynacue	yes
battery	Lifespan: 4-6 hours Capacity: 9Ah Charger input: 110-240V
Acquisition rate	Up to 100,000 samples per second
Operating temperature	-50 to 40°C
environment	IP66
Integrated GPS	Continuous NMEA String Logging

If you are interested in this product, please feel free to contact us.