

Iceradar FICE-100

Find the best route
through ice!

Observe
ice conditions
by radar

Hybrid ice radar



FURUNO FINLAND OY

Increase safety

- Visualizes ice structures
- Discovers the optimum route to go through ice
- Shows the track in bad visibility
- Usable ice detection up to 3 NM
- Ice radar stabilizes the ice picture compared to the navigation radar using advanced algorithms

Ice radar displays the ice conditions

The FICE-100 removes the image noise making the fine structures of the ice more visible. Hybrid ice radar captures the raw radar signal from the ARPA processor.

The result is a stable image that includes the fine details found in the radar echoes.

Use less power

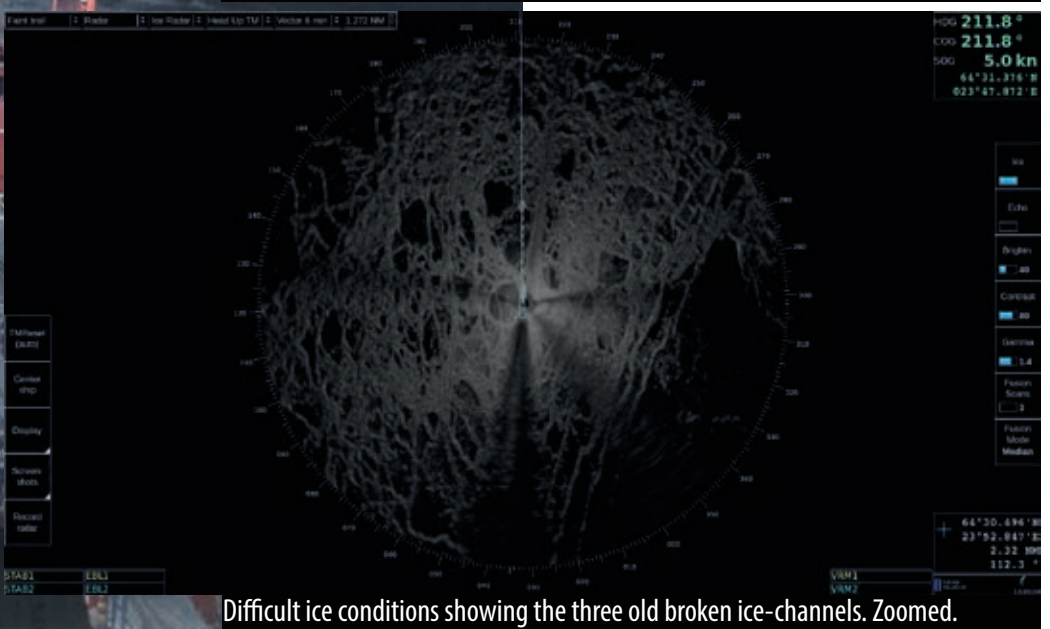
By using ice radar vessels can find the old rifts, clean ice and channels made by icebreakers and other vessels. Finding and using these, the vessel consumes much less power and saves fuel and time!

FICE-100 is an alternative to an Infrared camera

Infrared cameras are challenging to maintain in icy conditions. Ice radar is a supplementary system for navigation radar to observe ice conditions using the same outdoor equipment.



Harbour view, showing the routes leave from the port and the port broken area.

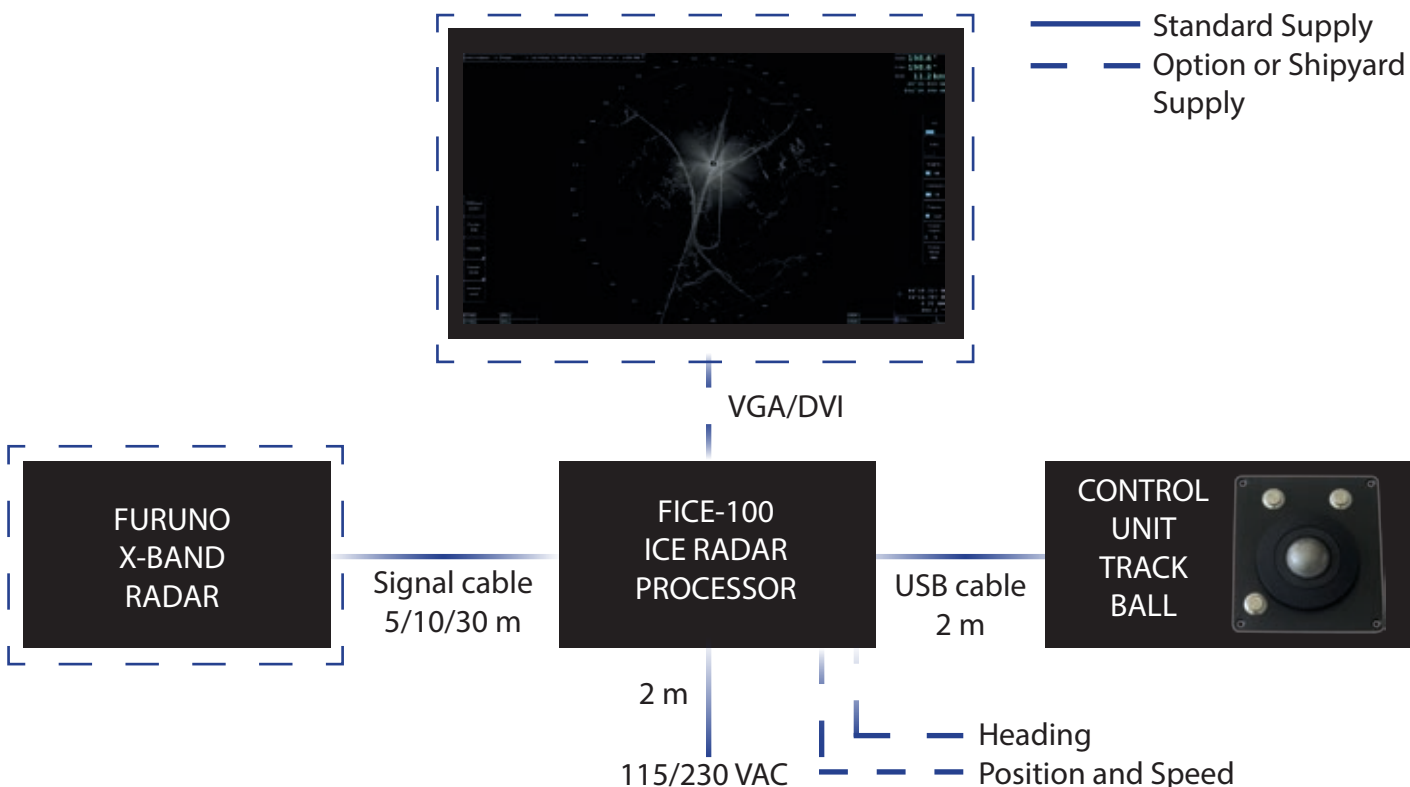


Difficult ice conditions showing the three old broken ice-channels. Zoomed.



A clear broken ice-channel in the direction of 228.8.

Interconnection diagram



SPECIFICATIONS		EQUIPMENT LIST	
General	Ice radar processor - marine rack computer	Standard	1. Ice radar processor
	Power supply 115/230 VAC, 50/60 Hz or 24 VDC		2. Signal cable for FAR-2xx7
	Trackball control unit		3. Control unit with 2 m cable
	High resolution high bandwidth digitizer 14 bit, 60 MHz sample rate		4. Standard spare parts and installation materials
	Ice radar display outputs DVI and VGA		
Input signals	Radar signals FAR-2xx7 or FAR-3000 X-band *)	Option	1. Ice radar display w. cable (Specify when ordering)
	- radar video and trigger		2. Optional 10 and 30m signal cable for FAR-2xx7
	- azimuth and heading line signals		
	- standard cable length is 5 meters		3. Optional 15, 30, 40 and 50 m signal cable for FAR-3000
	Heading, position and speed		

*) Minimum requirements for radar signals:

- Transceiver 12 kW
- Antenna radiator 4 ft
- Gear box 24 rpm