

# SOLUTION OVERVIEW

## Barent Sea Deployment

# DVM 50



Norwegian integrator, Specto Remote worked with BATS on the planning, deployment, and in-field testing of an adaptive, mobile wireless communications network in the Barent Sea. The network's objective is to deliver and maintain production data and communications between ENI Norway's Scarabeo 8 ultra deepwater drilling rig, and Viking Supply Ship's Njord Viking icebreaking supply vessel.

  
[www.batswireless.com](http://www.batswireless.com)  
8902 Vincennes Circle  
Indianapolis, IN 46268

Toll Free +1-888-955-8228  
Sales +1-317-500-4507  
Support +1-317-500-4506  
Email [info@batswireless.com](mailto:info@batswireless.com)

*Exclusive Partner:*

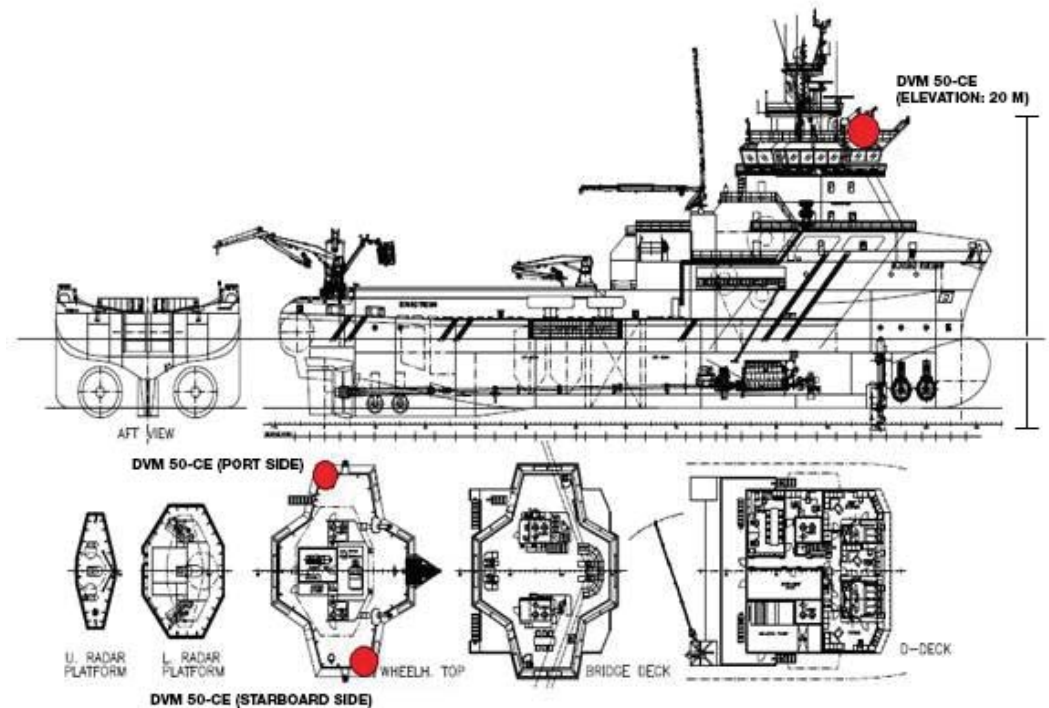
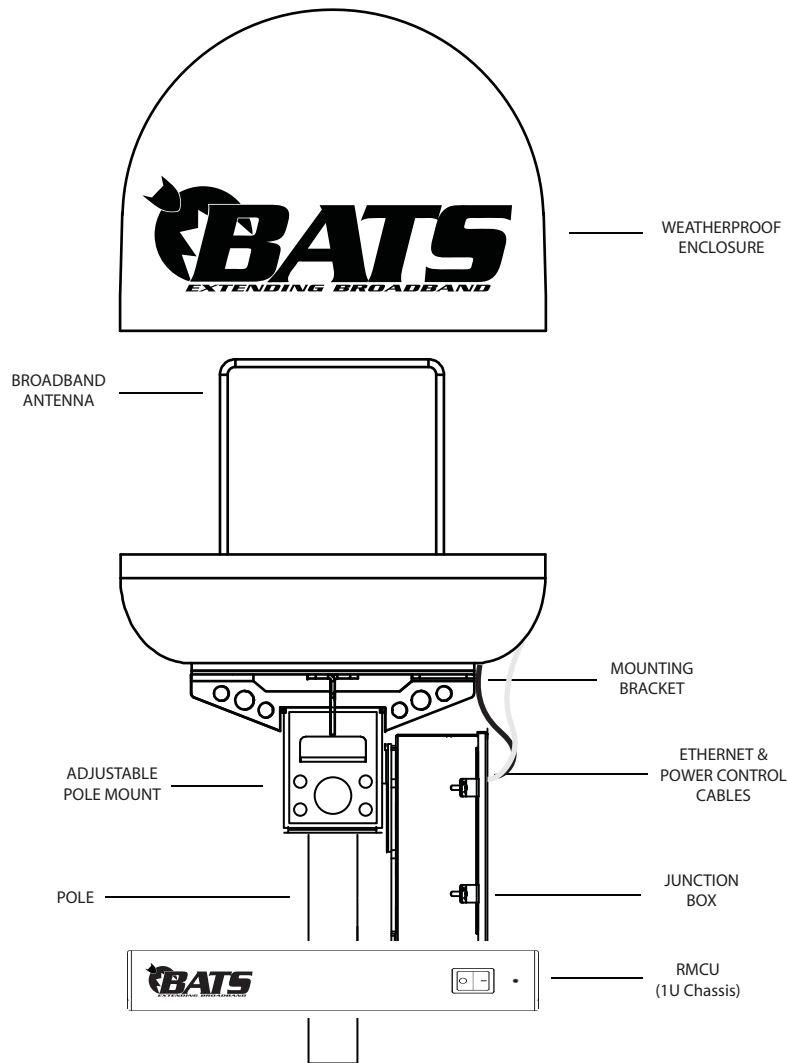
  
**SPECTOREMOTE**  
[www.spectoremote.com](http://www.spectoremote.com)

Specto Remote AS  
Nils Hansensvei 3  
0667 Oslo, Norway  
+47 23 05 19 90  
[post@spectoremote.com](mailto:post@spectoremote.com)

# SOLUTION OVERVIEW

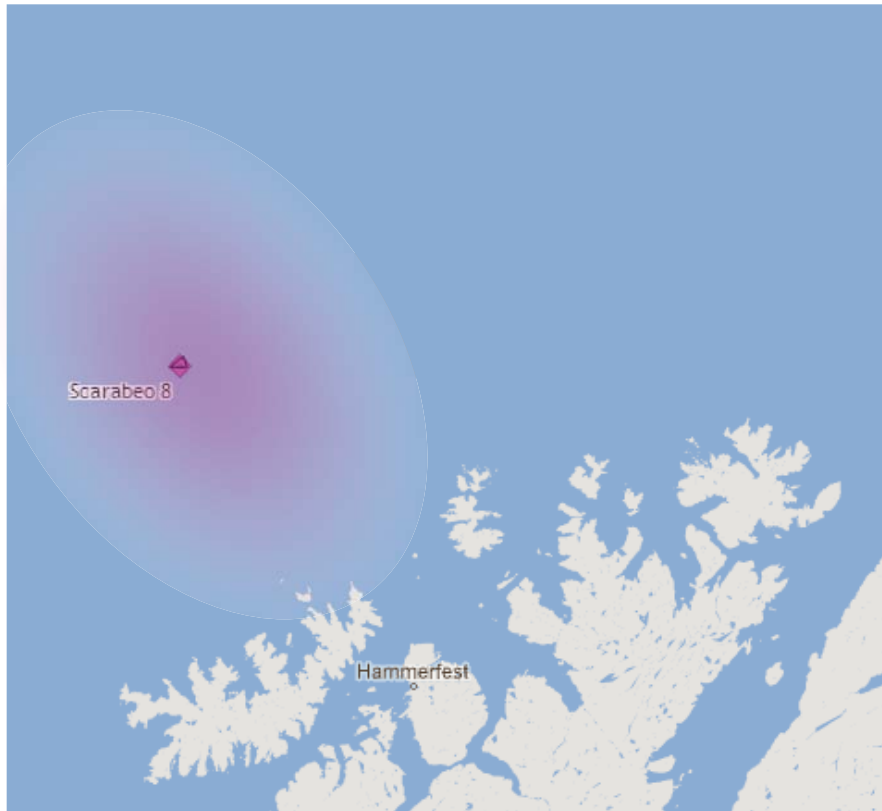
# DVM 50

The Njord Viking BATS installation was performed from March 13-15, 2013. Equipment utilized consisted of two BATS DVM 50CE tracking systems paired with subscriber radios, that were mounted in strategic areas, on both sides (port/starboard) of the ship to help mitigate signal blockage due to vessel equipment. Connectivity was made from the DVM 50CE systems on the Njord Viking to Mikrotik sectorized access points onboard Scarabeo 8.



# SOLUTION OVERVIEW

# DVM 50



Overall performance of the system exceeded expectations, with the DVM 50CE systems maintaining continuous levels of connectivity throughout all test cases.

Mobility performance validation was confirmed through a variety of maneuvers, including: approaching the platform, circling the platform, and roaming between sectors.

Overview		
Deployment Parameters		
	Scarabeo 8 (Platform)	Njord Viking (Ship)
LOCATION	LAT: 71.286362	See Movement
	LON: 22.28611	See Movement
AZIMUTH	0° - 360°	0° - 360°
ELEVATION	20 m (65.61 ft.) ASL	20 m (65.61 ft.) ASL
LINK DISTANCE	16.06 km (9.97 mi.)	
FREQUENCY	5.8 Ghz	
MOVEMENT (SHIP)	Tested Range: 0.5 km - 16.06 km (.311 mi - 9.97 mi)	
	Max Yaw: 360°	
	Max Pitch & Roll: ± 3°	
Proposed System Solution (As Configured)		
POSITIONING UNIT	BATS DVM 50CE (Continuous, Extended Temperature)	
CONTROL UNIT	RMCU 50	
RADIO (Scarabeo 8)	Modified Mikrotik	
RADIO (Njord Viking)	Robin Radio	
ANTENNA (Scarabeo 8)	Sector Antenna	
ANTENNA (Njord Viking)	Panel (1 ft.) Antenna	
PAN/TILT-AXIS RANGE	360° (-18.5°, +65°)	
PAN/TILT-AXIS SPEED	0.005° - 50°/sec (PAN) 0.005° - 10°/sec (TILT)	
Proposed Stabilization Rate (As Configured)		
MOVEMENT (YAW)	6° / sec	
MOVEMENT (PITCH)	3° / sec	

Adaptive network validation was confirmed through the successful migrating of communications data between the two DVM 50 systems via a specialized network load-balancer.