

long-range SURFACE CURRENT MAPPING

radio antenna specifications

(quantity 2 antennas)

transmit antenna

- 44' high
- Typically requires guy wire supports

receive antenna

- 20' high
- One 8' vertical element located at 12'
- Four 8' radial elements located at 12'
- Antenna mast support via guy wires

weather-proof enclosure

- Typical footprint: 36" h x 24" w x 38" d
- Requires ~1000 watts AC
- Network connection desirable

ideal installation conditions

- Close to ocean
less than 800 feet from water's edge
- Wide field of view (180° up to 360°)
- Area relatively clear of obstructions
power lines, antennas, large metal objects
- AC power available

signal specifications

- Output Transmit Power: 80W *peak*,
40W *average*
- Operating Frequency: 4.3-5.4 MHz
- Modulation Format
Pulsed Swept Frequency: CW
- Pulse Repetition Frequency: 256-512 Hz
- Duty Factor: 50%
- Sweep Width: 12-25 kHz (*typical*)
- Total Signal Bandwidth: 27-40 kHz
(*at -20dB level*)
- Polarization: *Vertical*
- Coverage Angle: 360°

