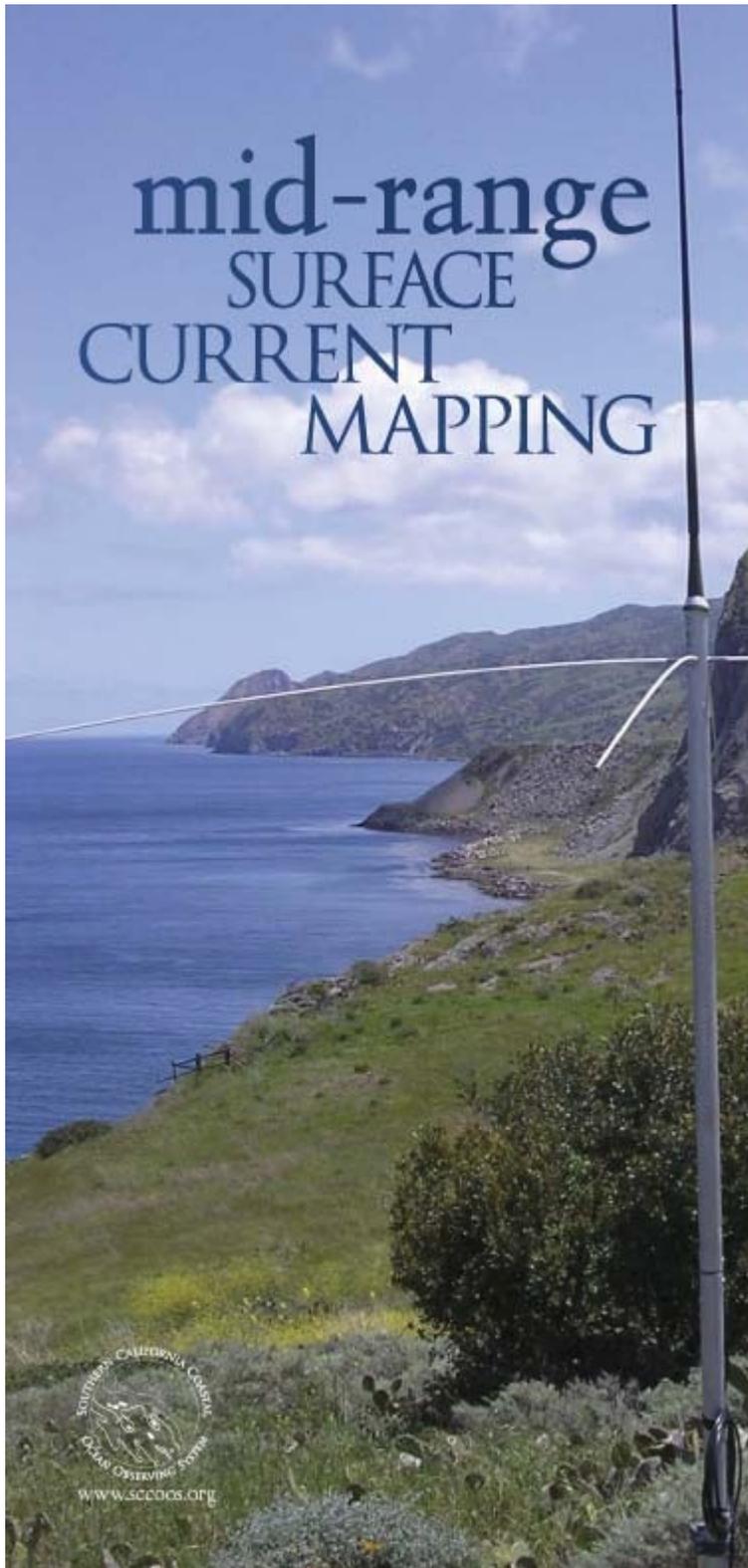


# Radiated Signal Specifications



## Mid-range Antenna Specifications (quantity 2 antennas)

### Transmit Antenna

- 28' high
- One 16' vertical element located at 12'
- Four 8' radial elements located at 12'
- Antenna mast support via guy wires

### 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 500 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: 11.5-14 MHz
- Modulation Format  
*Pulsed Swept Frequency: CW*
- Pulse Repetition Frequency: 1-8 kHz
- Duty Factor: 50%
- Sweep Width: 50-150 kHz (typical)
- Total Signal Bandwidth: 65-200 kHz (at -20 dB level)
- Polarization: Vertical
- Coverage Angle: 360°



## Long-range 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

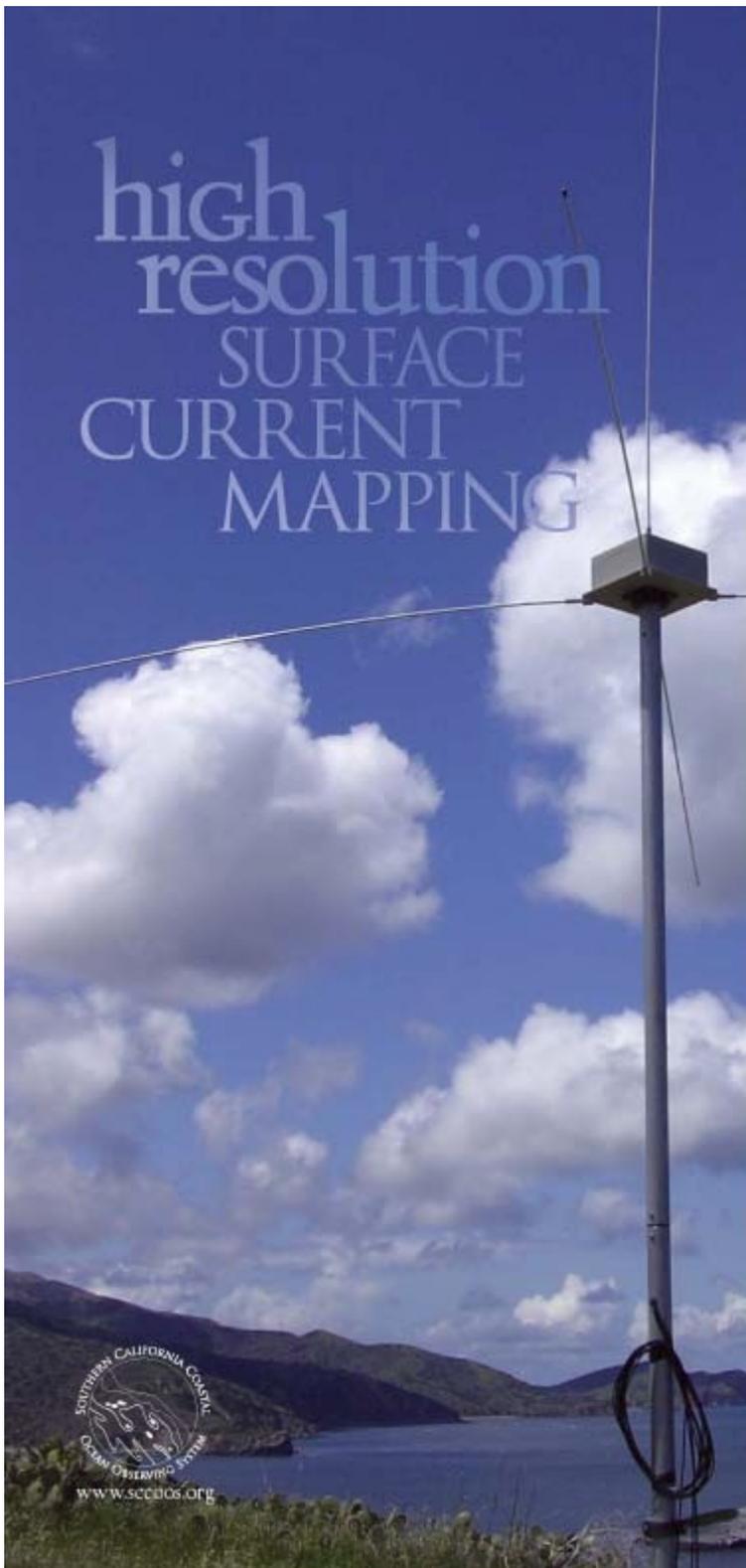
- Typical footprint: 36" h x 24" w x 38" d
- Requires ~1000 watts AC
- Network connection desirable

### 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 -20 dB level)
- Polarization: Vertical
- Coverage Angle: 360°



## High Resolution Antenna Specifications (quantity 1 antenna)

### Transmit/Receive antenna

- One 8' vertical element located at 12'
- Four 4' radial elements located at 12'
- 12' high
- 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 500 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: 24-27 MHz
- Modulation Format  
*Pulsed Swept Frequency: CW*
- Pulse Repetition Frequency: 4-8 kHz
- Duty Factor: 50%
- Sweep Width: 150-500 kHz (typical)
- Total Signal Bandwidth: 160-510 kHz (at -20 dB level)
- Polarization: Vertical
- Coverage Angle: 360°