AvL TECHNOLOGIES
MODEL 2460 Manual Tripod
2.4M Portable Troposcatter Antenna

Reflector
2.4 m, 9 piece Carbon Fiber

Optics
Offset, Prime Focus, 0.8 f/D

Feed
C-Band LP 2-port

Positioner Type
Ultra Lightweight Manual with Integral Base and Extending Stabilizer Legs

Drive System
Unique Azimuth Mechanism and Elevation ACME Screw Manual Actuators Allow Full Range of Motion for Both Coarse and Fine Adjustment

Mount Geometry
Elevation over Azimuth

Polarization
Manual Rotation of Feed

Mechanical

Travel

Azimuth
Coarse 360° Continuous
Fine ±10°

Elevation
Coarse -5 – 90° (With Tropo Spacer)
Fine -5 – 90° (With Tropo Spacer)

Polarization (Ku) ± 95°

Stowed Configuration
Positioner, Boom, Struts Positioner 37” X 18” X 9”, 80 lbs.
In One Transit Case: 60” X 36” X 26”, 120 lbs. max
Tripod 26” x 24” x 60”, 60 lbs. Not including ballast required in center column.
In One Transit Case: 30” X 27” X 63”, 174 lbs. max
Reflector Two Cases, 38” x 38” x 22”, 120 lbs. each
Feed One Case, 43” x 28” x 21”, 70 lbs.

Set-up Time
Less than 15 minutes

RF Interface

BUC Mounting Feed Boom, Rear of Reflector, Or Remote
Coax Two connectors at Amplifiers

Electrical Interface
Connectors at Amplifiers

Environmental

Wind

Operational
Without anchoring 25 mph
With anchoring 30 mph gusting to 45 mph
Survival (anchored) 80 mph in zenith (90° elevation) position

Pointing Loss in Operational Wind
C-band Receive 0.8 dB typical, 2.0 dB max

Temperature
Operational -40° to 155° F (-40° to 68° C)
Survival -60° to 160° F (-51° to 71° C)
### Electrical

<table>
<thead>
<tr>
<th>C-Band</th>
<th>Receive</th>
<th>Transmit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polarization</td>
<td>Linear orthogonal</td>
<td></td>
</tr>
<tr>
<td>Frequency Range (GHz)</td>
<td>4.4 - 5.0</td>
<td>4.4 – 5.0</td>
</tr>
<tr>
<td>Gain (Midband) (dBi)</td>
<td>39.4</td>
<td>39.4</td>
</tr>
<tr>
<td>VSWR</td>
<td>1.30:1</td>
<td>1.30:1</td>
</tr>
<tr>
<td>Beamwidth (-3 dB)</td>
<td>1.9°</td>
<td>1.9°</td>
</tr>
<tr>
<td>Radiation Pattern Compliance</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; sidelobe &lt; -20dB, 2&lt;sup&gt;nd&lt;/sup&gt; &lt; -25dB</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; sidelobe &lt; -20dB, 2&lt;sup&gt;nd&lt;/sup&gt; &lt; -25dB</td>
</tr>
<tr>
<td>Ant Noise Temperature @ 20° El, midband</td>
<td>49° K</td>
<td></td>
</tr>
<tr>
<td>Cross Pol Isolation, on-axis</td>
<td>35 dB</td>
<td>35 dB</td>
</tr>
<tr>
<td>Cross Pol Isolation, within pointing cone</td>
<td>28 dB standard</td>
<td>30 dB standard</td>
</tr>
<tr>
<td>Power Handling Capability</td>
<td></td>
<td>1000 watts per port</td>
</tr>
</tbody>
</table>

### Options

- BUC/LNB mounting
- Waveguide interconnect options
- Wind Anchoring options – ground stakes, sand bags
- Computer Assisted Pointing (CAP)