The A6 diversity ground antennas were designed to provide high-gain 360° diversity signal reception without the cost and complexity of a dedicated tracking system. Each antenna uses six independent sectors with overlapping reception beam-widths. Integrated into the design are high-performance UHF down-converters with exceptional selectivity characteristics. This conversion to a UHF frequency band lowers cost, improves efficiency, minimizes cable loss and reduces noise.

A6 sector antennas can produce up to 15dBi of gain in any one direction and are available in single to tri-band configurations.

A6 antennas are specifically designed to take advantage of Troll Systems’ extensive experience designing diversity infrastructure equipment. Troll’s DMR6000 diversity receivers, for example, feature passive “loop through” so they can be daisy-chained together to receive multiple RF signal sources on different antenna inputs. This feature makes it possible to support multiple aircraft and ground vehicles with a single diversity antenna. DMR receivers also incorporate Maximum-Ratio Combining and packet switching to “knit together” signals from different antenna panels and different antenna sites to provide cohesive 360° coverage over wide operational areas.

To provide secure transcoding and distribution to command centers or the internet, Troll’s VNS (Video Network Server) provides real-time, air-to-ground IP video and data streaming to local networks and Internet smart devices. The VNS incorporates advanced server-side encryption to protect mission video and data on either side of the firewall and enables multiple video and data streams from these assets to reach command and operational personnel on common network devices.

Six high-gain sector antennas
1.4 to 7.1GHz - single to tri-band
Compact - light weight
Internal BDCs and filters as required
Simultaneous multi-band options available
Permanent and tripod mounting options
Up to 15dBi gain
Multi-Frequency | Multi-Channel Panel Diversity System

SPECIFICATIONS

Specifications subject to change without notice.

**System Properties**
- **Connection:** TNC for RG6 Cable
- **Control:** NA
- **Input Power:** Power over coax 11-32VDC
- **Input Current:** 3W
- **Output:** UHF
- **Control Device:** Troll DMR Series Diversity Receiver

**Block Down Converters**
- RF Frequency Bands: 1.2GHz - 7.2 GHz (specify frequency range)
- IF Frequency Range: 150 - 900 MHz
- Noise Figure: L-S Bands < 2dB, C Bands < 3 dB, 35dB nominal

**Environmental**
- **Operating Temperature:** -15°C to +55°C, -40°C to +80°C

**Mechanical**
- **Dimensions:** 8.7” W x 20.7” H x 5.4” D
- **Weight:** 8lbs
- **Mounting:** 2” to 4” pipe mount
- **Downtilt Bracket:** +20° to -20°

**Antenna Characteristics**

<table>
<thead>
<tr>
<th></th>
<th>Low L Band</th>
<th>Low L Band</th>
<th>S Band</th>
<th>Lower C</th>
<th>Upper C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type:</strong></td>
<td>Dual Can</td>
<td>Dual Slot</td>
<td>Dual Slot</td>
<td>Quad Slot</td>
<td>Quad Slot</td>
</tr>
<tr>
<td><strong>Mid-Band:</strong></td>
<td>1.4-1.5 GHz</td>
<td>1.7-1.9 GHz</td>
<td>2.2-2.5 GHz</td>
<td>4.4-5.0 GHz</td>
<td>6.4-7.1 GHz</td>
</tr>
<tr>
<td><strong>Beamwidth:</strong></td>
<td>65°AZ / 35°EL</td>
<td>63°AZ / 33°EL</td>
<td>60°AZ / 30°EL</td>
<td>63°AZ / 14°EL</td>
<td>60°AZ / 12°EL</td>
</tr>
<tr>
<td><strong>Antenna Gain:</strong></td>
<td>11 dBi</td>
<td>12 dBi</td>
<td>13 dBi</td>
<td>14 dBi</td>
<td>15 dBi</td>
</tr>
<tr>
<td><strong>Polarization:</strong></td>
<td>Vertical</td>
<td>Vertical</td>
<td>Vertical</td>
<td>Vertical</td>
<td>Vertical</td>
</tr>
</tbody>
</table>

**Benefits**
- Lower installation costs
- Provide 360° reception on up to three frequency bands simultaneously
- Minimize operator workload
- 1.4GHz to 7.1GHz converted to UHF

**Installation**
Installation costs are reduced by minimizing the equipment and cables required to configure a system.