The A1 is a ground sector antenna designed to provide approximately 60° of coverage. The A1 is lightweight and easy to mount on buildings or on towers. The A1 is designed to be installed around a structure to create an overlapping high-gain reception system. Multiple A1s can be used to form a 360° diversity antenna system capable of up to 15dBi of gain in any one direction when positioned correctly.

The A1 can be purchased in either single or multi-band versions. It incorporates a high-performance down-converter that has exceptional selectivity and noise figure characteristics. This enables the A1 to provide a UHF output regardless of the input frequency. Power for the A1 is provided through coaxial cable that connects the antenna to Troll’s versatile diversity receiver and antenna controller, the DMR6000.

The output of each antenna is fed into Troll Systems’ DMR receiver which is capable of switching between individual antennas to ensure maximum performance. Troll’s DMR6000 series receivers provide two to eight antenna inputs with secure Ethernet backhaul capability.

Benefits
- Lower installation costs
- Reception up to three frequency bands simultaneously (up to eight antennas inputs per diversity receiver)
- Packet-based IP distribution
- 1.4GHz to 7.1GHz down-converted to UHF Band
- Ethernet backhaul DMR6000 diversity receiver

1.4 to 7.1GHz in bands
Compact - lightweight
Single to tri-band options
Internal BDCs and filters as required
Multiple pipe mounting options
Up to 15dBi gain
Compact, Sector Antennas for High-Gain Diversity Receive Systems

**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
- **Gain:** 35dB nominal

### 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 Can</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>1.4-1.5 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>65°AZ / 35°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>11 dBi</td>
<td>13 dBi</td>
<td>14 dBi</td>
<td>15 dBi</td>
</tr>
</tbody>
</table>

### 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°

Specifications subject to change without notice.

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The Data Link Experts
Troll Systems’ products are Made in the USA