**T1 Deployable X/Y System**

Based on our very successful and reliable Type 1 X/Y system, this variant offers capacity to 2.4m in a deployable format suitable for L, S, X, C, Ku, Ka and Q bands. This is achieved by providing a folding quad-pod base and split casings to provide easily assembled sub components at manageable weights.

- X/Y axis configuration
- No ‘cone of silence’ (keyhole) at zenith
- Ideal for tracking LEO, MEO and GEO spacecraft
- Lights Out Monitor & Control and Scheduling
- Custom software control
- Low power consumption
- High reliability
### Specifications

**Available Options:**
- Dual frequency / polarization
- High performance LNAs or LNBs
- Full RF chain:
  - Frequency converters
  - Spectrum analyzers
  - RF switching
  - Demodulators/modems
  - Uplink amplifiers
  - Carbon Fiber Reflector (up to 2.4m)
- Fiber optic communications
- Feed configurations

### Contact

**Space & Component Technology**  
6181 Chip Ave.  
Cypress, CA 90630 USA  
Toll Free: 1.866.264.0793  
www.trackmysat.com

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### Mechanical/Safety

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenna Mount (split case deployable)</td>
<td>Type 1 X/Y</td>
</tr>
<tr>
<td>Aperture Size</td>
<td>.8m – 2.4m</td>
</tr>
<tr>
<td>Pointing Accuracy</td>
<td>&lt;.05°</td>
</tr>
<tr>
<td>Position Step Resolution</td>
<td>0.00004°</td>
</tr>
<tr>
<td>Acceleration</td>
<td>10°/s² (upper/lower axis; faster if needed)</td>
</tr>
<tr>
<td>Velocity</td>
<td>4°/s typical (upper/lower axis; faster if needed)</td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>2 (X and Y)</td>
</tr>
<tr>
<td>Axis Travel</td>
<td>Full hemispheric coverage</td>
</tr>
<tr>
<td>Horizon limits</td>
<td>-1° typical</td>
</tr>
<tr>
<td>Emergency Stop</td>
<td>Antenna mounted panic button</td>
</tr>
<tr>
<td>Anemometer</td>
<td>High wind self stow</td>
</tr>
</tbody>
</table>

### Control System

- Interface: Ethernet
- Power:
  - 110/240Vac, 1ph, 1000W
  - Satellite scheduler with TLE propagator
  - Complete system hardware M&C
  - Remote lights out interfaces include HTTP, SNMP, XML
- Operating System: Linux based

### RF (optional)

- Frequency Range: L, S, X, C, Ku, Ka, and Q Band
- Polarization: LHCP and/or RHCP
- Feed Configuration: Prime Focus and Cassegrain

### Environmental

- Wind Speed: 80 km/hr wind (Operational)  
  200 km/hr wind (Survivable)
- Temperature: -40°C - +60°C (Operational)  
  Optional measures (heaters, radomes, HVACs) can be taken to improve operational environmental limits
- Humidity: 100% Relative Humidity
- Driving Rain: Up to 10 cm/hr

### Structural

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>Upper Axis – 75kg</td>
</tr>
<tr>
<td></td>
<td>Lower Axis – 75kg</td>
</tr>
<tr>
<td></td>
<td>Quad–pod–50kg</td>
</tr>
</tbody>
</table>

### Anti-icing
- Webcams
- Vehicle mountable
- Installation services
- Flight Cases

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(1) Many other feed configurations available upon request  
(2) Optional measures (heaters, radomes, HVACs) can be taken to improve operational environmental limits