• **Over 120 Man-Years of Antenna Experience**
The Quasonix antenna team comprises design, manufacturing, and test experience dating back to the 1980s, with several hundred systems delivered—many still in use 20 years or more after commissioning.

• **Complete Tracking Antenna Systems**
Quasonix offers the entire system: pedestals, reflectors, feeds, motors, servos, slip rings, acquisition aids, and the industry’s most full-featured antenna control unit—all backed by the legendary Quasonix technical support.

• **Modular Pedestal Design**
Robust tracking systems are available to support reflectors from 3 feet to 20 feet in diameter; Quasonix has right-sized antennas for fixed, mobile, or portable applications.

• **Plano-Centric Drive Systems**
Advanced design delivers positioning accuracy and repeatability to 0.01 degrees; sealed gearbox housings require no adjustments and have provided flawless operation for 20 years—and still counting.

• **Simultaneous Transmit and Receive**
Quasonix offers simultaneous tracking on downlink signals with uplink transmission to the target vehicle; user has independent selection of antenna polarization, as well as the RF transmit/receive bands.

• **Antenna Control Unit (ACU)**
Accepts pointing data from remote customer slave sources; server based local ACU allows for slaving of one PD series to another and enables tracking from user provided files of predicted or projected data.

• **Conical Scanning or Electronic Scanning**
Bulletproof conical scanning provides the lowest cost and highest possible C/T, while electronic scanning mitigates tracking jitter due to signal modulation induced by motion of the target vehicle.

• **Seamless Multi-band Operation**
Covers Lower L, Upper L, S, and C bands all in one unit; no feed swapping.

www.quasonix.com
Available for Military and Commercial Applications
Quasonix tracking antennas are in the field supporting fixed and mobile antenna tracking applications, typically operating in remote locations and hostile environments; system installations include data link antenna terminals, command destruct antennas, and electronic warfare systems.

Standard Product Development
Designed for rapid adaptation to customer specifications with minimal cost or effort—without compromising performance or quality.

On-Site Telemetry System Service and Repair
Quasonix provides new antenna systems AND services existing systems, including third party equipment, at the customer site.

Need an upgrade? Quasonix will upgrade your current system and offers maintenance and training services.

Combine Quasonix Telemetry Transmitters and RDMS™ Receivers with the Precision Drive Telemetry Antenna and Antenna Control Unit for a consistent set of operating parameters—One stop shopping for your aeronautical telemetry links!
Precision Drive (PD) pedestals are the nucleus of every Quasonix antenna system. This mechanical foundation must position the antenna quickly and accurately, and do so for many years with minimal maintenance. That's why every element of the PD pedestal is designed with very high performance margins:

- **Motors**
  The total package of drive motors, servos, and gearing are selected to guarantee delivery of the full range of velocity and accelerations after accounting for worst case wind loading. Your antenna will always deliver the performance you paid for.

- **Bearings**
  All pedestals use sealed, maintenance-free bearings, designed to carry at least double the weight of the moving parts (reflector, feed, acquisition aid, etc.). Your antenna will track smoothly, for years.

- **Plano-centric Gearboxes**
  Plano-centric gearboxes are derived from the robotic assembly industry where they run 100% duty cycle for months at a time. These are the most robust gearboxes ever applied to tracking antenna systems, providing years of maintenance-free service with backlash of less than 0.016 degrees. Your antenna will be pointed exactly where you intended.

- **Servo Amplifiers**
  Quasonix provided state-of-the-art servo amplifiers are fully compensated and have comprehensive protection and ACU monitoring. This conservative design philosophy leads to years of trouble free operation, even under heavy usage.

- **Sealed Enclosures**
  All PD pedestals and feeds are sealed with O-rings (not gaskets) and pressurized to eliminate any possibility of moisture ingress. Thermostatically controlled heaters provide an added measure of environmental immunity.

- **Dehydrators**
  Optional dehydrators even remove moisture from the air before pumping it into the sealed enclosures. Your pedestal will have a desert climate on the inside, even when installed in the tropics.

- **Connectors**
  All PD pedestals utilize MIL-DTL-38999 aerospace grade sealed connectors for outdoor connections. Your antenna will give years of consistent, dependable operation. No more “flaky” intermittent behavior.

- **Slip Rings and Rotary Joints**
  All PD pedestals are available with 60 circuit slip rings and 2 or 3-channel rotary joint for continuous 360 degree azimuth rotation. Naturally, these are also sealed against environmental contaminants.

**Dozens of systems on U.S. military and commercial aircraft programs have been in service with zero working defects for over 100 operational pedestal hours.**
Plano-centric Gearboxes

All pedestals systems are provided with plano-centric drives (supplied in sealed gearbox housings). Commonly used in robotics, such as pick- and-place machines, plano-centric drives have excellent performance features, superior to those of conventional gear transmissions.

- Excellent positioning accuracy
- High torque capacity
- Zero (less than 1 arc-min) backlash
- High single-stage reduction ratio
- High efficiency
- Minimal wear, long life
- High torsional stiffness
- Long life expectancy with minimal maintenance and zero adjustments

Environmental Protection

Quasonix recommends the use of air dehydrators with each system to prevent the ingress of moisture into the pedestal, the antenna feed, and the servo amplifier sub system.

- Dehydrator alarm indicators displayed remotely on the ACU1000 front panel
- Compressor overrun and high/low pressure condition protection and alarms
- Dry air regulation to 0.4 psig
- Pressurization of moisture sensitive electronic enclosures and positioner interior spaces
- Thermostatically controlled heaters for environmental control located within the PD Series of positioners and feeds
- O-Ring sealed access hatches throughout the PD Series positioners
ACU1000 Antenna Control Unit

- **Flexible Interfaces—Control Any Brand of Pedestal**
  The Quasonix ACU1000 employs a modular design approach so it can control Quasonix antenna pedestals AND interface to legacy products from EMP, Malibu, and others.

- **Intuitive User Interface**
  Bright 15" touch screen with hand wheels or joystick for local control; Mouse and keyboard provide intuitive remote control; For remote-only applications, the ACU1000 is available without the touch screen chassis.

- **Multiple Tracking Modes**
  Accepts pointing data from remote customer slave sources; Server based local ACU allows for slaving of one PD series to another and enables tracking from user provided files of predicted or projected data.

- **Robust Industrial Design**
  Redundant power supplies and either Linux or Windows 7 operating systems yield rock-solid performance and zero maintenance.

- **Client-Server Architecture for Maximum Operator Control**
  Operates in either local or remote modes with the remote interface consuming only a few kbps of network bandwidth; Multiple operators can view the local ACU simultaneously while a request channel allows control to be moved to any remote.

- **Supports HyperTrack™ Interface**
  Bypassing the legacy AM and AGC interfaces entirely, the revolutionary HyperTrack™ interface from Quasonix brings you faster, more accurate tracking than you’ve ever seen before; Schedule a demo today.

- **Comprehensive Diagnostics**
  Built-in Test (BIT) and target simulation ensure peak performance on every mission; Comprehensive data logging utilities allow detailed post-mission analysis.
Quasonix combines a state-of-the-art FPGA based, real-time ACU with a straightforward, touch screen user interface for local or remote control. This enables the user to work from a single integrated display for configuring, monitoring, and controlling all missions. All status related to the pedestal and ACU operations can be continuously broadcasted via a multicast port, allowing any computer on the network to gather all system information in one data log, time-stamped ASCII file.

- **Touch Screen User Interface**
- **Front Panel Azimuth and Elevation Axis Hand Wheels**
- **Back Panel USB, Ethernet, Serial, and Test Ports**
- **Solid State Hard Drive**
- **Redundant Power Supplies**
- **Local or Remote Operation**
- **Comprehensive Calibration Tools**

Control any auto-tracking antenna with the touch screen user interface
HyperTrack™ 21st Century Antenna Tracking

- **Revolutionary antenna tracking control loop**
  Tightly integrates receiver with antenna control unit (ACU)

- **High Speed, all-digital interface between receivers and the ACU**
  - Very low and deterministic latency supports wider tracking loops
  - Bi-directional information flow

- **Faster, more accurate tracking**
  Especially important at C-band, where antenna beamwidth is smaller

- **Matched filter detection of scanning signal**
  Dramatically improves rejection of AM induced by target motion

- **Superior rejection of interfering signals**
  ACU is not “fooled” by large signals that are not the signal being tracked

- **Tracking on intermittent downlink signals**
  Optimized for time division duplex systems, such as iNET

- **Exclusive to Quasonix**
  Legacy AM and AGC interfaces are still available on both the receiver and the ACU

- **Extensive diagnostic and simulation capabilities**

**Typical Antenna System Optimized with HyperTrack™**

Any Telemetry Transmitter → HyperTrack™ reduces signal wobble optimizing antenna control → RF → Antenna Control → Quasonix Precision Drive Telemetry Antenna

HyperTrack™ inside RDMS™ Receiver processes dish orientation, feed state optimizes antenna control → High Speed Digital State In → High Speed Digital Control Out → Quasonix 1U Rack Mount RDMS™ Receiver

www.quasonix.com
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MULTI-BAND ANTENNA FEEDS

Antenna Feeds

- **Over 120 Man-Years of Antenna Experience**
  The Quasonix antenna team comprises design, manufacturing, and test experience dating back to the 1980s with several hundred systems delivered—many still in use 20 years or more after commissioning.

- **Maintenance-Free Conical Scanning**
  Utilizing brushless, hollow-shaft DC motors with permanently sealed bearings, high-precision balancing, and pressurized enclosures, Quasonix Conscan feeds provide decades of trouble free operation along with the highest achievable G/T for any size reflector.

- **Electronic Scanning for Highly Dynamic Targets**
  For applications where the target itself is creating a highly modulated signal (rotorcraft, for example), Quasonix offers electronic scanning with scan rates up to 50 kHz.

- **Multiple Frequency Bands in a Single Feed**
  Both the Conscan and Escan feeds are available in multi-band configurations covering Lower L, Upper L, S, and C bands in a single feed; Low loss, high selectivity cavity tuned filters for interference rejection.

- **Dual Polarizations for Both Receive and Transmit**
  Conscan and Escan feeds offer simultaneous left hand and right hand circular polarizations in all bands; The diversity combiner in your receiver merges those signals to improve link margin by up to 3 dB.

- **Environmentally Sealed and Pressurized**
  Pressurized environment for the feeds prevents moisture from entering the enclosure, further extending equipment life and ensuring consistent performance in any weather.

- **Backward Compatible with Legacy Designs**
  Use of standardized mounting rings and connections allows a high performance Quasonix feed to be a drop-in replacement for feeds from other manufacturers.

**Electronically Scanned Feeds**

- **Electronic Scanning for Highly Dynamic Targets**
  Quasonix Escan feeds sweep the beam by electronic means, allowing scan rates up to 50 kHz. These high scan rates can greatly mitigate the challenges inherent in tracking targets that impose high degrees of amplitude modulation on the transmitted signal (rotorcraft or spinning missiles, for example).

- **Precision Machining of Waveguides**
  Assures best possible low VSWR and low axial ratio across the band.

- **Acquisition Aid**
  The Escan feed offers 10 dB to 12 dB of gain without a reflector making it ideal for use as an acquisition aid.
Conical Scanning Feeds

- **Highest Possible G/T**
  Quasonix Conscan feeds integrate hollow shaft brushless DC motors with the most innovative waveguides in the industry to cast the smallest shadow on the reflector. In conjunction with the direct routing of the waveguides to the RF output connectors, this ensures that the complete system is delivering the highest quality signal.

- **Optional Acquisition Aid**
  For applications where the target may go out of view, Quasonix provides a range of low-gain tracking acquisition aid antennas. These RF assemblies can be mounted either behind the tracking feed assembly or at the side of the reflector. Providing low gain and large beamwidth, these acquisition aids are ideal for close in tracking and initial acquisition of targets. This is seamlessly integrated so that crossover between the two feeds requires no operator intervention.
### Quasonix Antenna System Part Number Builder

**QSX** - PD XXX - XX X - XX X - XX

**Quasonix Product**
- Precision Drive Antenna System

**Pedestal Size**
- 300
- 450
- 500
- 750
- 900

**Reflector Size**
- 03 – 3 Feet
- 04 – 4 Feet
- 05 – 5 Feet
- 06 – 6 Feet
- 08 – 8 Feet
- 10 – 10 Feet
- 14 – 14 Feet
- 16 – 16 Feet
- 20 – 20 Feet

**Slip Ring/Cable Wrap**
- CW: Cable Wrap
- S2: Slip Ring/2-Channel Rotary Joint
- S3: Slip Ring/3-Channel Rotary Joint

**Options**
- in any order
- Refer to options table on page 11

### Quasonix Feeds Part Number Builder

**QSX-AFD** - C C - XX

**Standard Antenna Prefix Feed**
- C: Conscan Auto-Tracking
- E: Escan Auto-Tracking
- N: Non-Tracking

**Scanning**
- C: Conscan Auto-Tracking
- E: Escan Auto-Tracking
- N: Non-Tracking

**Options**
- in any order
- Refer to options table on page 11

### Quasonix ACU Part Number Builder

**QSX-ACU** - T L X - VG

**Standard Antenna Control Unit**
- T: Conscan Auto-Tracking
- E: Escan Auto-Tracking
- N: Non-Tracking

**Servo Control Type**
- L: Local ACU Servo Control
- E: Ethernet Remote Servo Ctrl (RMC)
- S: Single Mode Fiber Optic RMC
- M: Multi-Mode Fiber Optic RMC

**Chassis**
- X: 8U Rack Mount, 15” Touchscreen Display, Azimuth/Elevation Hand Wheels
- S: Small Form Factor, 3U Rack Mount, Blank Front Panel

**Options**
- in any order
- Refer to options table on page 11
PRECISION DRIVE TELEMETRY ANTENNA SYSTEM OPTIONS

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>Acquisition Aid</td>
</tr>
<tr>
<td>AS</td>
<td>Auto Stow</td>
</tr>
<tr>
<td>CA</td>
<td>Camera</td>
</tr>
<tr>
<td>FC</td>
<td>Fiber Optic Servo Control</td>
</tr>
<tr>
<td>FR</td>
<td>Fiber Optic RF</td>
</tr>
<tr>
<td>GY</td>
<td>Gyroscope/IMU</td>
</tr>
<tr>
<td>GP</td>
<td>Differential GPS</td>
</tr>
<tr>
<td>PS</td>
<td>Pedestal Spacer</td>
</tr>
<tr>
<td>SF</td>
<td>Site-Specific Feed Filtering</td>
</tr>
<tr>
<td>VG</td>
<td>High/Low Gain Switch</td>
</tr>
</tbody>
</table>

ANTENNA FEED OPTIONS

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>Coaxial Acquisition Aid</td>
</tr>
<tr>
<td>SF</td>
<td>Site-Specific Filters</td>
</tr>
<tr>
<td>TX</td>
<td>Transmit Capable</td>
</tr>
<tr>
<td>VG</td>
<td>High/Low Gain Switch</td>
</tr>
</tbody>
</table>

ANTENNA ACU OPTIONS

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS</td>
<td>Auto Stow Control</td>
</tr>
<tr>
<td>GP</td>
<td>Differential GPS Interface</td>
</tr>
<tr>
<td>GY</td>
<td>Gyroscope/IMU Input</td>
</tr>
<tr>
<td>HT</td>
<td>HyperTrack</td>
</tr>
<tr>
<td>TC</td>
<td>IRIG-B Time Input</td>
</tr>
<tr>
<td>TR</td>
<td>TX/RX Switch Control</td>
</tr>
<tr>
<td>VG</td>
<td>High/Low Gain Switch Control</td>
</tr>
</tbody>
</table>

BAND CODE TABLE

<table>
<thead>
<tr>
<th>Freq. Code</th>
<th>Lower L: 1435.0 MHz to 1540.0 MHz</th>
<th>S: 2200.0 MHz to 2400.0 MHz</th>
<th>C: 4400.0 MHz to 4940.0 MHz</th>
<th>C: 5091.0 MHz to 5250.0 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>F</td>
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<tr>
<td>S</td>
<td>[ ]</td>
<td>[ ]</td>
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<td>[ ]</td>
</tr>
<tr>
<td>V</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
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</tr>
</tbody>
</table>

Legend:
- Frequency Gap
- Standard (Base) Frequency Range
## Side by Side Comparisons of Precision Drive Antenna Systems

<table>
<thead>
<tr>
<th>Antenna Capability</th>
<th>PD300</th>
<th>PD450</th>
<th>PD500</th>
<th>PD750</th>
<th>PD900</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Up to 4 feet (1.2M)</td>
<td>Up to 6 feet (1.8M)</td>
<td>Up to 8 feet (2.44M)</td>
<td>Up to 15 feet (5M)</td>
<td>Up to 20 feet (6.1M)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Typical Conscan Performance</th>
<th>G/T - Beamwidth</th>
<th>G/T - Beamwidth</th>
<th>G/T - Beamwidth</th>
<th>G/T - Beamwidth</th>
<th>G/T - Beamwidth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500 MHz</td>
<td>-0.5</td>
<td>3.5</td>
<td>6.3</td>
<td>12.7</td>
<td>14.5</td>
</tr>
<tr>
<td>2300 MHz</td>
<td>3.0</td>
<td>7.0</td>
<td>9.8</td>
<td>16.2</td>
<td>18.0</td>
</tr>
<tr>
<td>Compliance (radians/ft lb)</td>
<td>1.75 x 10^-5</td>
<td>2.3 x 10^-5</td>
<td>2.0 x 10^-5</td>
<td>4.0 x 10^-7</td>
<td>2.0 x 10^-7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pedestal Wgt</th>
<th>175 lbs</th>
<th>400 lbs</th>
<th>800 lbs</th>
<th>2400 lbs</th>
<th>3950 lbs</th>
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</table>

<table>
<thead>
<tr>
<th>Wind</th>
<th>Operating</th>
<th>Gusting</th>
<th>Survival</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>50 MPH</td>
<td>50 MPH</td>
<td>50 MPH</td>
</tr>
<tr>
<td>120 MPH</td>
<td>65 MPH</td>
<td>65 MPH</td>
<td>65 MPH</td>
</tr>
<tr>
<td>208/400 VAC</td>
<td>50-60 Hz, 3Ø</td>
<td>120 MPH</td>
<td>120 MPH</td>
</tr>
<tr>
<td>50-60 Hz, 1Ø</td>
<td>115/230 VAC</td>
<td>120 MPH</td>
<td>120 MPH</td>
</tr>
<tr>
<td>50-60 Hz, 1Ø</td>
<td>115/230 VAC</td>
<td>120 MPH</td>
<td>120 MPH</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power Requirements</th>
<th>1.5 KW</th>
<th>2.5 KW</th>
<th>3.0 KW</th>
<th>4.0 KW</th>
<th>5.0 KW</th>
</tr>
</thead>
<tbody>
<tr>
<td>115/230 VAC</td>
<td>115/230 VAC</td>
<td>115/230 VAC</td>
<td>115/230 VAC</td>
<td>208/400 VAC</td>
<td></td>
</tr>
<tr>
<td>50-60 Hz, 1Ø</td>
<td>50-60 Hz, 1Ø</td>
<td>50-60 Hz, 1Ø</td>
<td>50-60 Hz, 1Ø</td>
<td>50-60 Hz, 3Ø</td>
<td></td>
</tr>
<tr>
<td>Cont-125 ft-lbs</td>
<td>Cont-235 ft-lbs</td>
<td>Cont-900 ft-lbs</td>
<td>Cont-3600 ft-lbs</td>
<td>Cont-5800 ft-lbs</td>
<td></td>
</tr>
<tr>
<td>Peak-250 ft-lbs</td>
<td>Peak-400 ft-lbs</td>
<td>Peak-1800 ft-lbs</td>
<td>Peak-7200 ft-lbs</td>
<td>Peak-12000 ft-lbs</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Torque</th>
<th>Cont-125 ft-lbs</th>
<th>Cont-235 ft-lbs</th>
<th>Cont-900 ft-lbs</th>
<th>Cont-3600 ft-lbs</th>
<th>Cont-5800 ft-lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak-250 ft-lbs</td>
<td>Peak-400 ft-lbs</td>
<td>Peak-1800 ft-lbs</td>
<td>Peak-7200 ft-lbs</td>
<td>Peak-12000 ft-lbs</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Velocity</th>
<th>30°/sec</th>
<th>30°/sec</th>
<th>30°/sec</th>
<th>20°/sec</th>
<th>20°/sec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceleration</td>
<td>40°/sec²</td>
<td>40°/sec²</td>
<td>40°/sec²</td>
<td>20°/sec²</td>
<td>20°/sec²</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Backlash</th>
<th>0.016 degrees typical</th>
</tr>
</thead>
<tbody>
<tr>
<td>VSWR</td>
<td>2.0:1 maximum</td>
</tr>
<tr>
<td>Axial Ratio</td>
<td>2.0 dB maximum</td>
</tr>
<tr>
<td>Polarization</td>
<td>Simultaneous dual or single, all variants of Circular or Linear polarization</td>
</tr>
<tr>
<td>Travel</td>
<td>Azimuth: Continuous, Optional up to ±420° with pre-limits</td>
</tr>
<tr>
<td>Environmental</td>
<td>Elevation: -8° to +188° (Software), -10° to +190° (Electrical), -12° to +192° (Mechanical)</td>
</tr>
</tbody>
</table>

Specifications subject to change without notice
QTrack™
PORTABLE LOW GAIN ANTENNA

• **Self-Contained Ground Station**
  The low gain antenna based on the Quasonix Acquisition Aid Antenna, coupled with the industry-leading RDMS telemetry receiver, is the perfect solution for portable or mast mounted antenna applications.

• **Portable**
  Carrying case doubles as a local mount for a free-standing antenna; incorporates built-in leveling feet (3) and level indicator.

• **Simplified Two Cable Connection**
  Requires only 115 VAC 1Ø 60 power and an RJ45 Ethernet connection (with IP option).

• **Simultaneous LHCP and RHCP RF Outputs**
  2-channel rotary joint allows continuous azimuth travel.

• **Dual Axis Pedestal**
  Multi-band SCM feed mounted in a dual axis pedestal; includes power supplies, slip rings, and rotary joint.

• **Electronic Scanning for Highly Dynamic Targets**
  Quasonix feeds sweep the beam electronically allowing scan rates up to 50 kHz—greatly mitigating the challenges inherent in tracking targets that impose high degrees of amplitude modulation on transmitted signal.

www.quasonix.com
### CIRCULAR AND RECTANGULAR ANTENNA AND PEDESTAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Low Gain Circular</th>
<th>High Gain Rectangular</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Frequency</strong></td>
<td>1435.0 - 2400.0 MHz continuous, 4400.0—5250.0 MHz continuous</td>
</tr>
<tr>
<td><strong>Polarization</strong></td>
<td>Simultaneous Right Hand and Left Hand Circular</td>
</tr>
<tr>
<td><strong>VSWR</strong></td>
<td>2:0:1 maximum</td>
</tr>
<tr>
<td><strong>Axial Ratio</strong></td>
<td>2.0 dB maximum</td>
</tr>
<tr>
<td><strong>Antenna Type</strong></td>
<td>Electronic Scanning</td>
</tr>
<tr>
<td><strong>Array Size (Diameter)</strong></td>
<td>13.25 inches nominal</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>&lt; 15 lbs (7 kg)</td>
</tr>
<tr>
<td><strong>Antenna Gain (nominal, linear polarized receive, RHCP and LHCP outputs combined)</strong></td>
<td>1435.0 MHz +7.0 dB 2400.0 MHz +10.0 dB 4400.0 MHz +9.0 dB 5250.0 MHz +9.0 dB</td>
</tr>
<tr>
<td><strong>Antenna Beamwidth (3 dB) (nominal)</strong></td>
<td>40°</td>
</tr>
<tr>
<td><strong>Sidelobes (nominal)</strong></td>
<td>10 dBP</td>
</tr>
</tbody>
</table>

**Environmental**

- Operating Temperature: Operating -40°C to +52°C Storage -54°C to +71°C
- Storage Temperature: -54°C to +71°C
- Relative Humidity: Up to 100%, including condensation (radome protected)

**Pedestal Specifications**

- **Type**: Elevation/Azimuth
- **Backlash**: ≤ 0.2 degrees
- **Velocity**: > 30°/sec
- **Acceleration**: > 40°/sec²
- **Travel Azimuth**: Continuous
- **Elevation**: -90° to +90° (Software, Electrical, and Mechanical limited provided)
- **RF Cabling Capability**: Two RF channels supporting frequencies through C-band, VSWR 2.0:1 Maximum each RF channel
- **Weight**: 25 lbs nominal
- **Power Requirements**: 115 VAC, 60 Hz, 1Ø

**Environmental**

- Operating Temperature: -40°C to +52°C
- Storage Temperature: -54°C to +71°C
- Relative Humidity: Up to 100%, including condensation (radome protected)
- **Rain**: Up to 4 inches per hour
- **Ice**: 1/2 inch, Radial
- **Wind**: Operating 50 MPH (80 km/hr), Gusting to 65 MPH (190 km/hr), Survival at 120 MPH (193 km/hr)

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### Specifications subject to change without notice
With razor-sharp focus on the aeronautical telemetry market and a team rich in talent, experience, and sheer determination, Quasonix is able to consistently design, develop and manufacture what our customers regard as market-leading telemetry products.

Quasonix is...Reinventing Telemetry™