

PD900 Series 24 ft (7.3 m) HyperTrack™ Telemetry Antennas



Big Is Just the Beginning

Quasonix PD900 Series Antennas are designed for sustained precision and reliability, reflecting decades of experience engineering large-aperture telemetry systems and built with robotics-grade components chosen for duty cycles far beyond typical telemetry demands. HyperTrack™ technology fuses real-time FPGA processing with advanced control algorithms to deliver fast response, smooth motion, and robust interference rejection. The PD900's modular architecture supports rapid-delivery COTS configurations and MOTS variants tailored to your requirements. Quasonix is... Reinventing Telemetry™.

Turn-Key Solution — Quasonix is a single source for your complete telemetry system, including transmitters, receivers, and precision antenna positioners, providing cost-effective, easily supported, and expedited solutions.

Multi-Band Feed Assemblies — Both the Conical and Electrical Scanning options are available with L/S/C coverage, single-frequency operation, and other band combinations. Our single-feed Electronic Scanning field leads the industry in performance. This array of feeds is not only battle-tested but flexible, allowing for Cassegrain, Prime Focus or a combination of the two.

Precision Positioning — Our steel structure provides stiffness and the highest pointing accuracy. Standard, commercially available drive components provide faster procurement and supportability. The gearbox is sealed, lubricated, and virtually maintenance-free—and delivers backlash of less than 1 arc minute. The high-capacity motor is widely used in industrial brushless servo motor and amplifier applications.

Modular System Designs — Standardized architectures enable build-to-stock availability for industry-leading delivery times, while preserving flexibility for efficient customization to specific requirements.

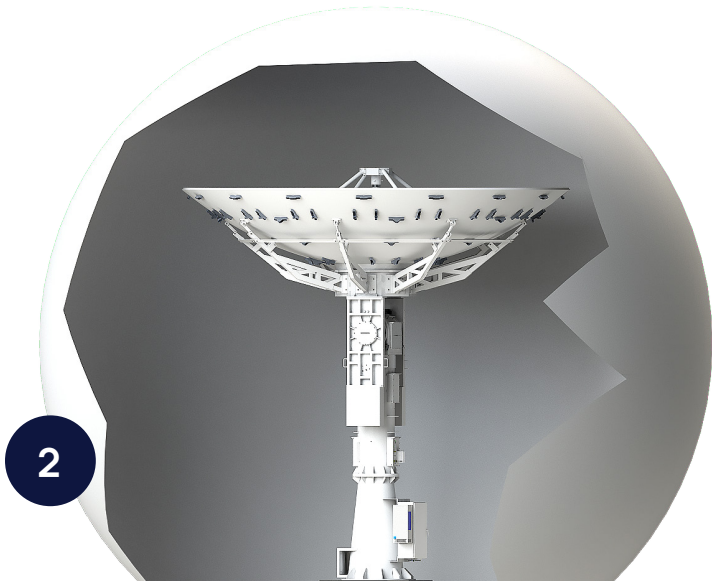
HyperTrack — With the HyperTrack Antenna Controller (HTAC), real-time processing is done in FPGA hardware, yielding faster response and extremely smooth, accurate tracking. It is standardized across all the positioner models and easily integrated into customers' networks. Our intuitive, user-friendly Graphical User Interface (GUI) fuses contemporary design with decades of operator experience.

Support — An industry-leading three-year warranty is provided standard with each antenna system. On-site and phone support are provided by expert staff from both East- and West-Coast facilities. Software updates and upgrades are provided at no charge. Upgrades are backward compatible and allow calibrations to be saved.

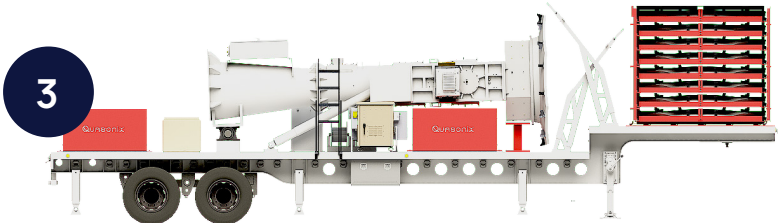
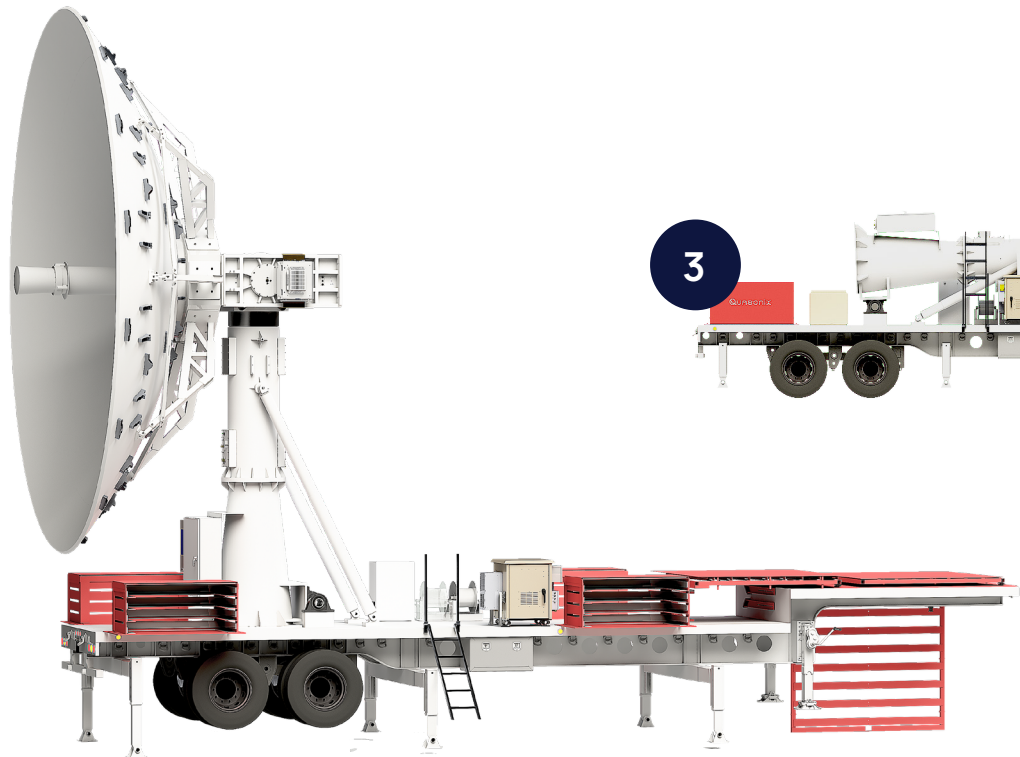
Deployment Examples



1. Model PD900 Antenna with custom environmentally controlled riser/shelter.

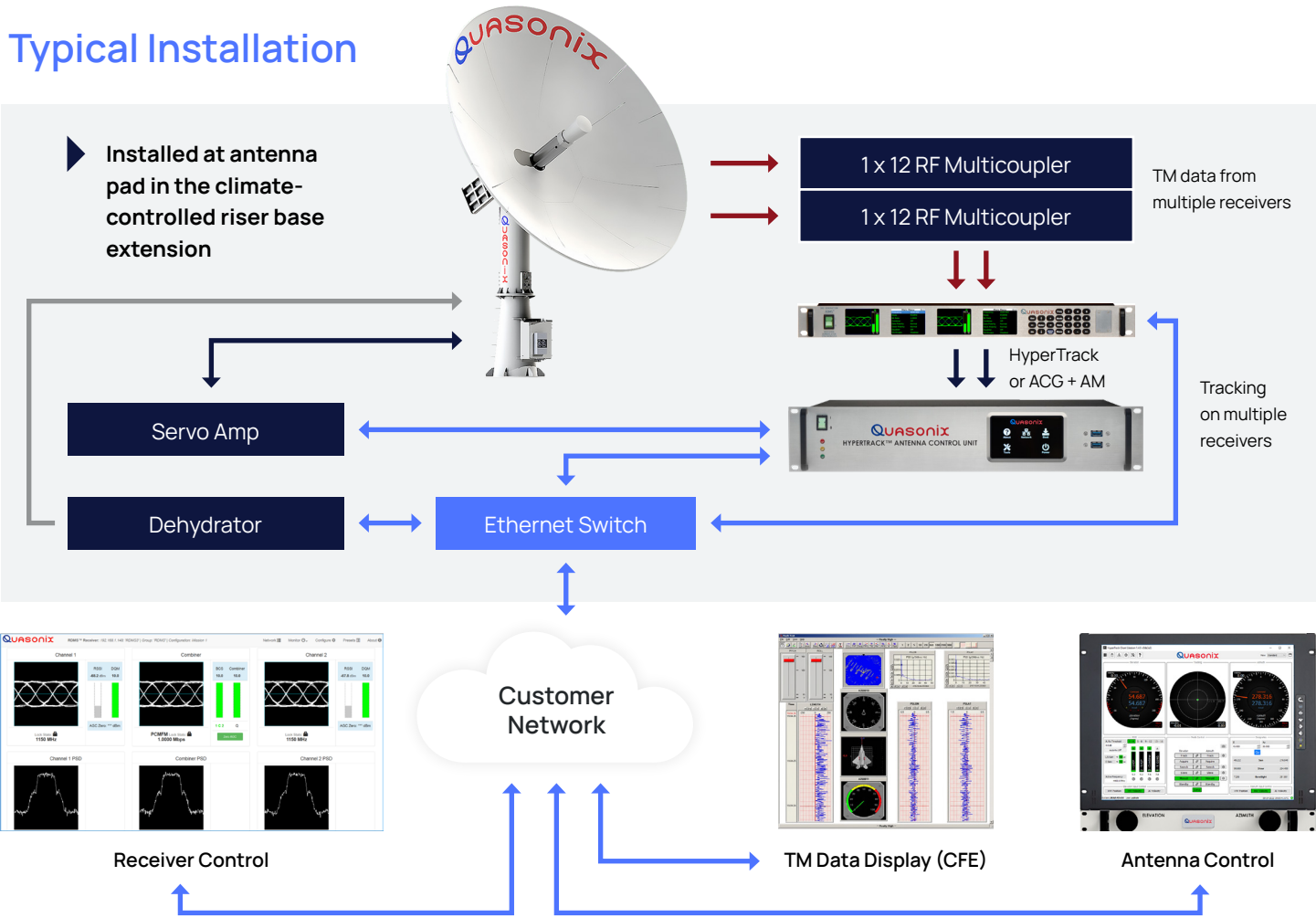


2. Model PD900 Antenna with radome.



3. The PD900 Mobile has been designed to be compliant with US road standards and US military air transport without modification. All Quasonix-supplied equipment is stored on the trailer system and not on the tow vehicle. The mobile configuration allows the user the most flexibility in multipurpose use of the asset.

Typical Installation



Performance

Typical Conscan Performance 24' (7.3 Meter) Gain and Beamwidth

1500 MHz	37 dBi min	2.2°
2300 MHz	40 dBi min	1.4°
4400 MHz	46 dBi min	0.65°
Wind Operating Gusting Survival	50 MPH 65 MPH 120 MPH	
Power Requirements	5.0 KW 208/400 VAC 50-60 Hz, 3Ø	
Velocity	15°/sec	
Acceleration	20°/sec ²	

Backlash	0.016 degrees typical
VSWR	2:0:1 maximum
Axial Ratio	< 2.0 dB maximum
Polarization	Simultaneous dual or single, all variants of Circular or Linear polarization

Environmental

Operating Temperature	-30°C to +52°C
Storage Temperature	-54°C to +71°C
Relative Humidity	Up to 100%, including condensation
Rain	Up to 4 inches per hour
Ice	1/2 inch, Radial



Get More with Quasonix

The PD900 Series Antenna is physically imposing by design—engineered at scale to reliably acquire and track the weakest signals, and built with robotics-grade components to perform flawlessly for years in demanding environments. But its true advantage goes beyond sheer size and superior hardware.

Every PD900 is designed and assembled by a team with decades of experience delivering large-aperture telemetry antennas, with dozens of systems deployed worldwide since the 1980s. Most installations are built around Quasonix ground station solutions, delivering capabilities not achievable with conventional systems, including Data Quality Metrics, FPGA-based signal processing, and Intelligent Gain Control. This performance is backed by an industry-leading warranty and lifetime technical support from the engineers that designed and built your system.

The PD900 isn't simply an antenna—it's a long-term investment in mission success.

Quasonix

All Quasonix products are under U.S. Dept. of Commerce jurisdiction. Quasonix antenna products are categorized as 5A991.
ISO 9001:2015 Certified | Specifications subject to change without notice.

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