

ADAPT™ PD750 Auto-Deployable Antenna System



Ready When You Are

Introducing the Quasonix Adapt™ PD750 antenna system. This auto-deployable antenna gives you our best-in-class HyperTrack™ data acquisition in a portable 12-foot (3.7-meter) reflector size with fast and easy setup, for the ultimate in mission readiness anywhere in the world. Quasonix is... Reinventing Telemetry™

HyperTrack™ – Incorporates dynamic tracking loop adjustments, interference mitigation techniques, and advanced system monitoring and feedback; all tracking calculations are done in FPGA hardware, with very low and very consistent latency. In addition to the normal AM and AGC interfaces, the HyperTrack™ antenna control unit (HTAC) also supports the advanced HyperTrack™ digital control interface and STRCI for seamless communication between your HTAC and RDMS™ receivers.

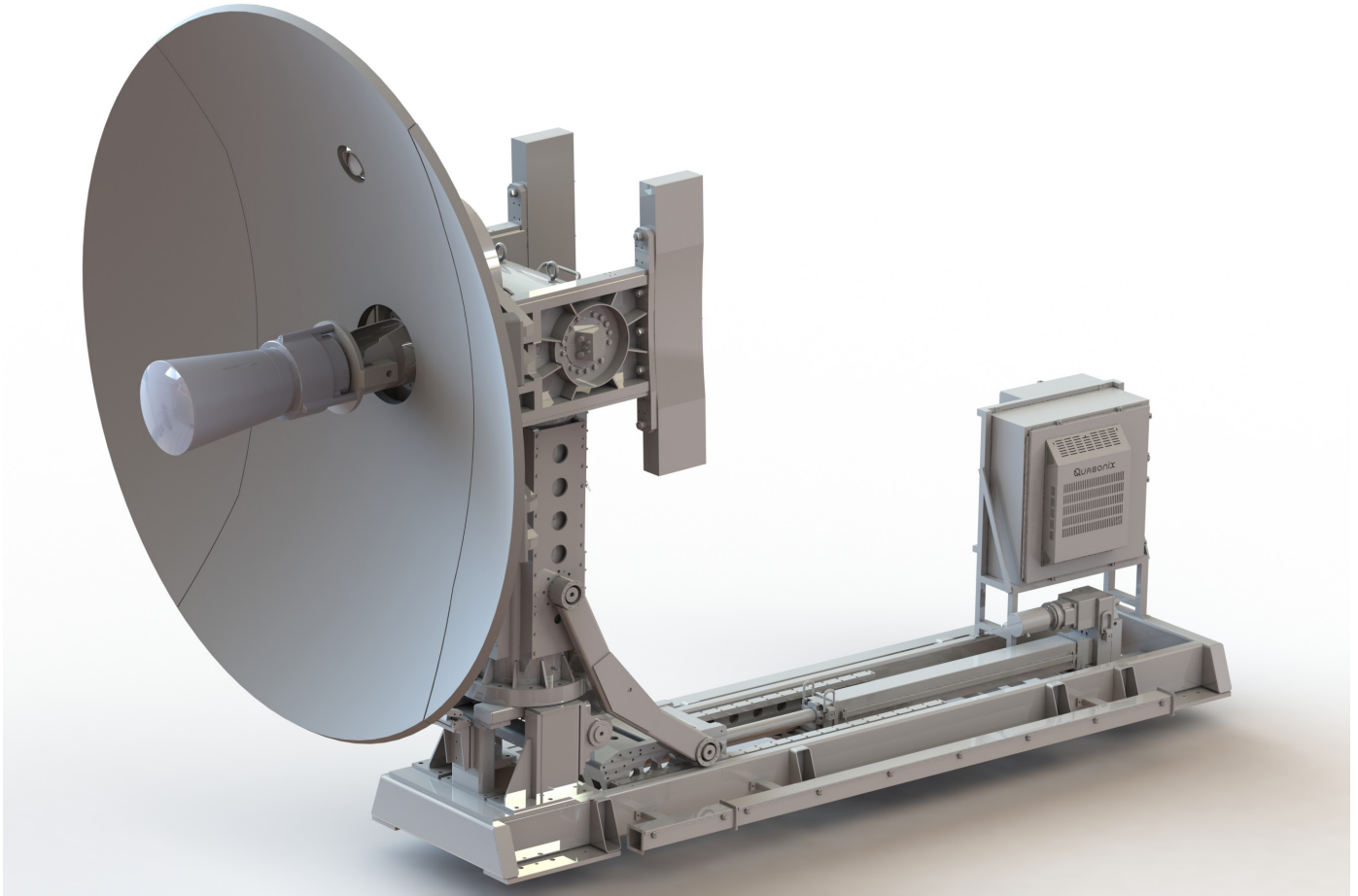
Auto-Deployable – Remotely controllable “handsfree” setup and breakdown. Switch from the portable, stored position to fully deployed within minutes.

Electronic Scanning for Highly Dynamic Targets – Feed sweeps the beam electronically, allowing scan rates from 100 Hz to 2 kHz—greatly mitigating challenges inherent in tracking targets that impose high degrees of amplitude modulation on transmitted signal.

Seamless L, S, and C Band Operation – Future-proof, with support for legacy TM bands while being ready for the move to C, all in one unit.

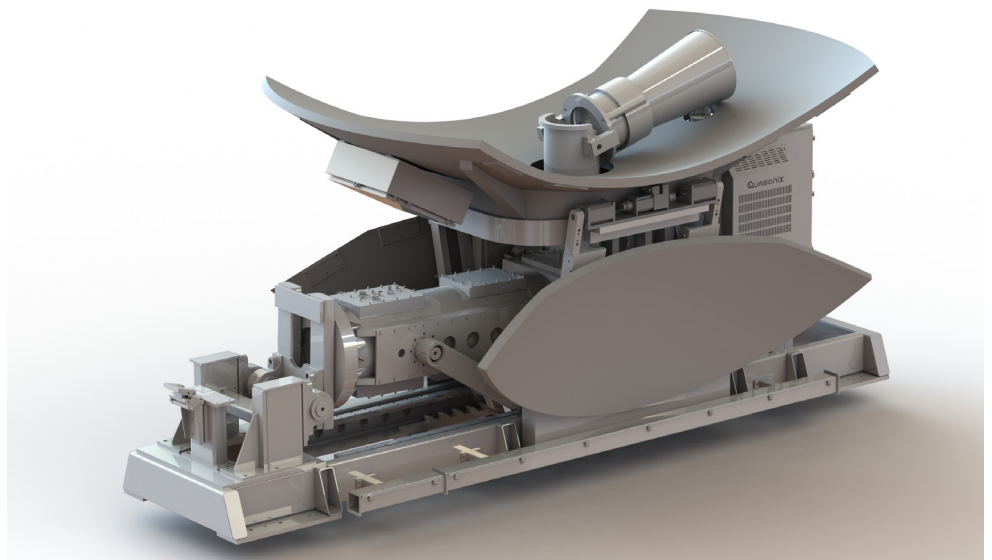
Enhanced Environmental Protection – Designed with the harshest environments in mind. All assemblies are Sealed for Positive Pressure (SPP), including the positioner and control cabinets for minimal maintenance.

Over 25 Years of Innovation – 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. We are here for you, with legendary support and lifetime software updates.



▲
ADAPT™ PD750 antenna fully
deployed.

ADAPT™ PD750 antenna in
its stored configuration ▶



Feed & Reflector

Operating Frequency	1435 to 1540 MHz (Lower L-Band) 1750 to 1850 MHz (Upper L-Band) 2200 to 2400 MHz (S-Band) 4400 to 4940 MHz (Lower C-Band) 5091 to 5150 MHz (Middle C-Band)	
Rejection Frequency <small>(Custom bands possible via selective filtration)</small>	1850 to 2200 MHz 2400 to 4000 MHz	
Polarization	Simultaneous Right Hand and Left Hand Circular	
Axial Ratio	2.0 dB maximum	
Antenna Type	Electronic Scanning	
Scan Rates	100 to 2000 Hz	
Reflector Size	12 feet (3.7 meters)	
G/T (dB/K) <small>(Can be optimized for specific operating bands)</small>	Frequency (MHz)	Typical G/T (dB/K)
	1500	7.4
	1810	9.2
	2300	11.5
	4670	15.1
	5120	16.5

Pedestal

Type	Elevation/Azimuth
Velocity	≤ 30°/sec, Both Axes
Acceleration	≤ 50°/sec ² , Both Axes
Azimuth Travel	Continuous
Elevation Travel	-15° to 195°
Stabilization	TBD
Backlash	0.016°, Typical

System

Voltage	208 VAC, 3 Phase, 60 Hz
Current	50 Amp Per Phase Max
Weight	10,500 lbs. Estimated
Overturning Moment	23,000 ft * lb (Wind Speed 125 MPH)
Required Structure Ridgidity	6.7×10^{-8} rad./ (ft.-lbf.)
Wind	Operating 50 MPH Gusting 65 MPH



You CAN take it with you

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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