

Radome

For Earth Station and VSAT Antennas, Coms-on-the-Pause (COTP), Coms on-the-Move (COTM)

Customers told us they needed a solution to keep antennas operating in extreme and harsh environments like ice, rain, high winds, and sandstorms. Traditional antenna radomes are not built for transportable operation, yet many of today's military, first-responder, and oil & gas applications on land can require deployable systems where harsh elements demand radome-like protection.



Walton 7' x 5.5' Portable Radome

Walton De-Ice	Baseline	Radome	Radome w/ rain water
Frequency	Gain	Gain/Loss	Gain/Loss
20.6 GHz	46.2 dBi	46.0 dBi (0.2 dBi Loss)	45.9 dBi (0.3 dBi Loss)
30.5.GHz	48.2 dBi	47.6 dBi (0.6 dBi Loss)	47.1 dBi (1.1dBi Loss)

Key Features

Multiple Frequency Options: L, S, C, X, Ku, K, and Ka-Band	Rapid Deployment less than an hour (unlike conventional radomes)	Wind Resistant 85 MPH (136 KPH) Wind Load Test
Light Weight	Fly Away Terminals	Quick Assembly
44.45 Kg. for a 3.13 x 1.6 Meter Unit	Airline Baggage Checkable	No Tools Required
Ability to De-Ice Radome (No Snow Ropes Required)	Hydrophobic Material Over Frame Structure Both Rf Transparent	Heating and/or Air Conditioning Options Available



Radome

- Walton De-Ice's new Portable Radome is designed to protect satellite terminals for applications such as transportable, coms on-the-pause (COTP), first responder, and similar VSAT and smaller earth station sites. Walton's solution is also resistant to high winds. It can also yield cost-savings for permanent installations, SNGs, and LEO/MEO gateway terminals.
- The rapid set-up Walton Portable Radome design unleashes new possibilities for operation in extreme environments, plus significant cost-savings compared to traditional antenna radomes. Installs in less than an hour.

Satellite Frequency Bands

- L-Band
- Ku-Band

Ka-Band

- S-Band
- K-Band
- C-Band
- X-Band

Outstanding Wind Survival

Walton's Portable Radome unit is designed to support operation during 85 mph (136 kph) wind conditions.





Labor-Savings | Automatic De-Icing or Air Conditioning | No More Manual Snow Removal

With the Walton Portable Radome, the days of manual snow removal are gone! Conventional radomes cannot be de-iced by heat transfer through the radome's material. To solve this problem, manufacturers offer a "Snow Rope" option that allows workers to manually remove the snow from a conventional radome. Not with Walton's solution.

A distinct advantage with Walton's solution is that it can be kept ice-free automatically using Walton De-Icing systems. The heat easily transfers through the Portable Radome to keep the Radome free of any ice or snow, with no strings (or snow ropes) attached.

In very hot climates, the interior of the radome can be cooled using a closed loop air/HVAC system to protect equipment temperatures underneath the Radome and prevent damage.



PE-ICE

Radome



Installation Costs Minimized

Depending on the antenna size, The Walton De-Ice system could also be installed with less shipping cost and labor expense, in just hours where a comparable size conventional radome takes a day or two with a crane.

Permanent Installations

On top of its portability and rapid deployment advantages, the Walton De-Ice Portable Radome system can also be installed as a permanent/fixed site system.



Cost Advantages

The Portable Radome design enables significantly lower cost-of-acquisition than conventional radomes. With its promise of cost-savings and survivability, the Walton Portable Radome may soon become an essential element for ground segment designers and integrator's need to consider for military, first-responder, and similar deployable satellite networks that need to work in extreme environments on land. LEO/MEO ground networks with polar region gateway requirements can also leverage the Portable Radome for its advantages in labor-saving, and upfront cost.



Assembly Parts

A 2.2'x 1.7m' Portable Radome model weighs under 45 kg. It is designed so that two persons can assemble or dismantle it in less than an hour. No tools required.

Additional Options

Walton's Portable Radome will be offered for civil or military applications offered as follows:

- White for Ka-Band (PTFE Architectural Fabric)
- U.S. Government purchasing CAGE Code: 5Z770 (five Z seven seven zero)





Stake Kit





An optional Aluminum Stake Kit with installation/removal tool is also available for all Portable Radomes to secure the Portable Radome to the ground if no concrete pad is available at site location. Ballast can also be used to secure the Portable Radome to the ground.







Tedlar Floor Kit



An optional Tedlar Floor Kit is available for all Portable Radomes. The Tedlar Floor Kit helps keep electronics and motor drives clean from any debris along with any fan intakes for electronic components.





A/C Unit



An optional Air Conditioning Unit can be purchase directly from the manufacturer to cool the electronics within the Portable Radome. As an option for the A/C Unit, Walton can provide all ducting and nozzles required to incorporate the A/C Unit with the Portable Radome.

https://www.oceanbreezeac.com/radome-units-that-withstand-heavy-vibration/#

Phone number: (866) 227-7773



De-Icing System





The automatically activated De-icing systems come in four different sizes 2KW, 4KW, 6KW and 12KW depending on the size of the Portable Radome. The De-icing systems can also be utilized as a heater for the electronics inside the Portable Radome using a thermostat to monitor the inside air temperature.

These are the same heating systems that have been used since 1996 De-icing the Snow Shield Cover products for VSAT and antennas up to 6.3 meters in size.





ECU Ports



Each Portable Radome is equipped with a Cable Access Opening that is sealed with Velcro loop and hook around the com cable after installation.

Each Portable Radome also is equipped with ECU ports for air-conditioning and/or heating units can be installed. The ECU ports are sized for 5 inch square-to-round ducting adapters that can be purchased as an option for interface with the Sea Breeze Air-Conditioning Units.