Rapidly Deployable Multi-band VSAT Terminal for Disaster Management



A m-VSAT antenna terminal is designed specifically for any application requiring a compact, rugged, multiband antenna which is rapidly deployable with no or minimal tools. It includes a multi-segmented glass fiber high density foam reflector, ensuring a very cost effective, light weight and excellent strength with very less deformation, even after being re-assembled hundreds of times. The m-VSAT terminal has a unique multi-band ring focus feed assembly allowing a change of frequency band in a matter of minutes simply by swapping out a quick release feed latches.

It is fully motorized and it can automatically acquire and track, even on inclined orbit satellites. Features such as fully adjustable wide spreading legs for high stability on any terrain.

For transportation it packs into its own mount which splits into two conveniently sized flight cases and one feed carrying case for transportation.

Applications area

Highly useful in Disaster situations which quickly deployable, requiring minimal tools, light weight, easy to transport VSAT system. This system is compliant for ISRO satellite/commercial band.

Specifications:

S. no.	Key Specifications	
1.	Antenna Type	Circular, Axially Symmetric with Ring Focus with Central Hub plus 6 Petals
2.	Diameter	1.8 m
3.	Configuration	Gregorian Ring Focus
4.	Polarization	Linear, orthogonal transmit & receive
5.	Power Requirement	250 V AC Power Supply
6.	Temperature	-20 to +70° C- Transport & Storage -10 to +60° C- Operational
7.	Wind Rating	Operational- 60 km/h with gusts to 72 km/h Survival- 120 km/h
8.	Altitude	4500 m
9.	Humidity	100%
10.	Elevation Adjustment	0 to 90°
11.	Azimuth Adjustment	+/- 170°
12.	Polarization Adjustment	+/- 95°
13.	Packed Size	Box-1: 1 m x 1 m x 1.2 m Box-2: 1 m x 1 m x 0.5 m Box-3: 0.85 m x 0.43 m x 0.83 m
14.	Weight	Box-1: 90 kg Box-2: 30 kg Box-3: 30 kg

Technology Transfer from ISRO

ISRO is willing to offer the knowhow of this technology to suitable entrepreneurs / industries in India. Capable manufacturing industries interested in acquiring this knowhow may write with details of their present activities, requirements and plans for implementation, infrastructure and technical expertise available with them, their own market assessment, if any, and plans for diversification to the address given below: