

Ultra Portable Ka-Band Flat Panel Terminal

Paradigm provide a combination of simple setup and optimal performance with the SWARM terminal, offering ultra portable communication services utilizing high-throughput Ka-Band satellite constellations for the commercial, government, disaster recovery and military sectors.

Features

- 45cm Flat Panel Antenna
- High Data Rates
- Total Weight only 14.5kg/32lbs
- Integrated PIM Baseband
- Integrated Antenna Mount
- Rapid Deploy and Stow
- Full Ka-Band Capability
- Low Power Consumption
- Tool-Free Assembly and Alignment
- Backpack, Hand Carry Case or IATA Checkable Case Options
- GX, Avanti and Thor 7 Compliant



The Paradigm SWARM is an extremely compact, rugged, lightweight and discreet system providing superior data rates. Complete with stowable legs, the SWARM is fully portable and quick to deploy and stow.

The system is designed around the PIM (Paradigm Interface Module) which hosts a modem for use on both Velocity and Evolution networks and provides on board monitor and control to manageable terminal components.

The SWARM provides everything needed for straightforward setup and pointing, allowing the user to be operational in less than 5 minutes. This simple, intuitive and tool-free deployment/setup method involves audio and visual pointing aids and provides an effective method of acquiring the satellite without the extra bulk of motors and controllers.

As a single integrated system, the SWARM can withstand harsh environmental conditions. It has comparable performance to a 65cm parabolic antenna and can be assembled and operated in half the height making it more unobtrusive and less affected by wind.

Compared to a parabolic the link budget's rain margin is also significantly reduced, as the signal passes through the antenna only once, reducing rain attenuation and increasing wet performance. Additionally, the flat panel design sheds water easily and avoids water pooling.

To increase flexibility and adaptability, Paradigm also offer a complete range of interface options. The SWARM is packaged in a single pack which can be carried as airline hand baggage.

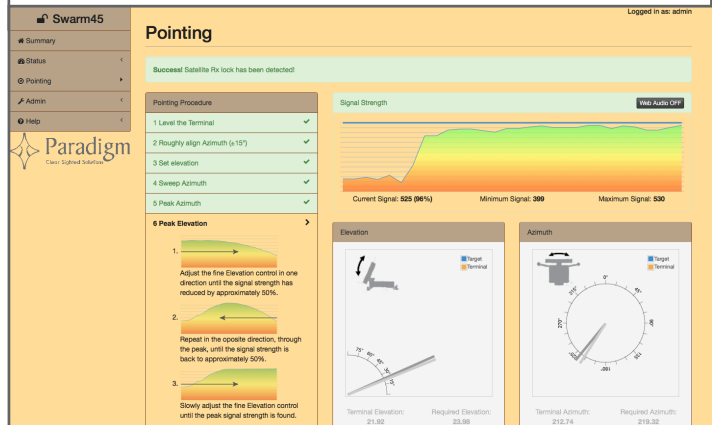
Reflector	
Reflector	45cm Flat Panel
EIRP	46.0 - 52.0 dBW
G/T	14 dB/K
Positioner	Ultra Lightweight Manual Adjust

Performance	
Ka-Band	
Frequency Range (GHz)	Rx 19.2 - 21.2 GHz * 29.0 Tx - 31.0 GHz *
BUC Power	5W, 10W, 20W
Polarisation	Circular, RH or LH
Local Oscillator	Rx 18.25GHz * Tx 28.55GHz *
Local Oscillator	@100Hz -50dBc/Hz
Phase Noise	@1KHz -75dBc/Hz
(Transmit)	@10KHz -81 dBc/Hz
	@100KHz -95 dBc/Hz
	@1MHz -105 dBc/Hz
	@10MHz -112 dBc/Hz
External Power	100-230VAC (50-60Hz)
Ingress Protection	IP65
Radiation Pattern	FCC 25.138, FCC 25.209
Compliance	
* Mil-Ka optiona	

Environmental	
Ambient Operating Temperature	
SWARM Antenna & PIM	-25°C to +55°C
Operating Humidity	
SWARM Antenna & PIM	0 to 95% (Condensing)
MIL-STD-810G for vibration, shock, salt fog, sand and dust, humidity and driving rain.	

Mechanical	
Azimuth Adjustment	180° Continuous
Fine	25° Continuous
Elevation Adjustment	0° to 90° Continuous
Polarisation	Manual Circular X-Pol RHCP/LHCP

Available On Request	
Customised Fibre & Wireless Solutions	
Extending Stabiliser Legs	
Tripod Mount	
Backpack, Hand Carry Case or IATA Checkable Case	
POE on Dataports	
DC External Power	
Mil-Ka Operation	
X-Band Operation	
Ku-Band Operation	




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