



Paradigm

Clear Sighted Solutions

Swarm45 Multiband

45cm Ultra Portable Ka, Ku & X-Band Flat Panel Terminal

Paradigm provide a combination of simple setup and optimal performance with the Swarm45 terminal, offering ultra portable communication services utilising high-throughput Ka, Ku and X-Band technology for the commercial, government, disaster recovery and military sectors.



Features

- **Flat Panel Antenna**
- **High Data Rates**
- **Total Weight only 14.5kg/32lbs**
- **Integrated PIM Baseband**
- **Integrated Antenna Mount**
- **Rapid Deploy and Stow**
- **Full Ka, Ku and X-Band Capability**
- **Low Power Consumption**
- **Tool-Free Assembly and Alignment**
- **Backpack, Pelicase or Hard Case Options**
- **Airline-Checkable**
- **GX Compliant**

Terminal Overview

The Paradigm Swarm45 Multiband is an extremely compact, rugged, lightweight and discreet system providing superior data rates. Complete with a low-profile mount, the Swarm45 Multiband 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 the required network (such as iDirect, Comtech, Paradise or Hughes) and provides on board monitor and control to manageable terminal components.

The Swarm45 Multiband 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 Swarm45 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.

Wet performance is also greatly increased when compared to a parabolic as the signal passes through the antenna only once, reducing rain attenuation. Additionally, the flat panel design sheds water easily and avoids water pooling.

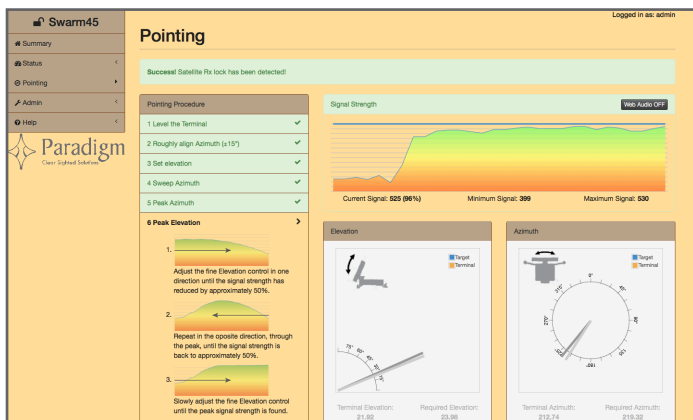
The Swarm45 Multiband is packaged in a single, airline-checkable backpack. Other packaging options such as a pelicase are also available.

Performance	Ka-Band		Ku-Band	X-Band
Frequency Range (GHz)	Commercial	Military		
Rx	19.2 – 20.2 GHz	20.2 - 21.2 GHz	10.70 -12.75 GHz	7.25 - 7.75 GHz
Tx	29.0 – 30.0 GHz	30.0 - 31.0 GHz	13.75 -14.50 GHz	7.90 - 8.40 GHz
Polarisation	Circular, RH or LH		Linear	Circular, RH or LH
Transmit Gain	38.5dBi		31.5dBi	27.5dBi
G/T	13 dB/K		11.5 dB/K	6 dB/K
Regulatory Compliance	FCC 25.222, ITU728-R, CFR47, 164A			

Mechanical	
Reflector	45cm Flat Panel
Positioner	Ultra Lightweight Manual Adjust
Azimuth Adjustment	180° Continuous
Fine	25° Continuous
Elevation Adjustment	0° to 90° Continuous
Ingress Protection	IP65
External Power	100-230VAC (50-60Hz)

Environmental	
Ambient Operating Temperature	
Swarm45 Antenna & PIM	-25°C to +55°C
Operating Humidity	
Swarm45 Antenna & PIM	0 to 95% (Condensing)
MIL-STD-810G for vibration, shock, salt fog, sand and dust, humidity and driving rain	

Available On Request	
BUC Options	
BUC M&C	
Customised Fibre & Wireless Solutions	
Extending Stabiliser Legs	
Tripod Mount	
Backpack, Transit Case or Pelicase Packaging	
POE on Dataports	
DC External Power	
Motorisation	
PIM Modem Options	




(Our policy is one of continuous improvement: therefore the right is reserved to change specification without notice)