

SWARM™ Multiband

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

Paradigm provide a combination of simple setup and optimal performance with the SWARM 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

- **45cm Flat Panel Antenna**
- **High Data Rates**
- **Total Weight only 14.5kg/32lbs**
- **Integrated PIM Baseband with other Interface Options available**
- **Integrated Antenna Mount**
- **Rapid Deploy and Stow**
- **Full Ka, Ku and X-Band Capability**
- **Low Power Consumption**
- **Tool-Free Assembly and Alignment**
- **Backpack or Hand Carry Case Options**
- **Compliant as Airline Carry-On Baggage**
- **GX, Avanti, Thor 7 and Intelsat Epic^{NG} Compliant**

Terminal Overview

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

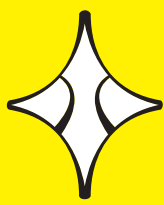
The system is designed around the PIM™ (Paradigm Interface Module) which hosts a modem for use on the required network (such as iDirect, Comtech, Paradise or Hughes) and provides on board monitor and control to manageable terminal components.

The SWARM 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 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.

The SWARM is packaged in a single pack which can be carried as airline hand baggage.



Performance	Ka-Band	Ku-Band	X-Band
Frequency Range (GHz)			
Rx	19.2 – 21.2 GHz	10.70 -12.75 GHz	7.25 - 7.75 GHz
Tx	29.0 – 31.0 GHz	13.75 -14.50 GHz	7.90 - 8.40 GHz
Polarisation	Circular, RH or LH	Linear	Circular, RH or LH
BUC Power	5W, 10W, 20W	16W, 25W, 40W	20W, 25W
EIRP	46.0 - 52.0 dBW	43.0 - 47.0 dBW	39.5 - 40.5 dBW
G/T	14 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	
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	

Available On Request

BUC Options
BUC M&C
Customised Fibre & Wireless Solutions
Extending Stabiliser Legs
Tripod Mount
Backpack, Hand Carry Case or IATA Checkable Case
Packaging
POE on Dataports
DC External Power
Motorisation
PIM Modem Options

