

SWARMKa

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 utilising high-throughput Ka-Band satellite constellations 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-Band**
- **Low Power Consumption**
- **Tool-Free Assembly and Alignment**
- **Backpack, Hand Carry Case or IATA Checkable Case Options**
- **Certified on Global Xpress for Global Satellite Usage**

Terminal Overview

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.

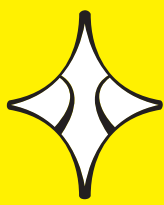
The SWARM provides everything needed for straightforward setup and pointing, allowing the user to be operational in less than 5 minutes. This simple, intuitive and tool-free deployment/setup method involves audio and visual pointing aids and provides an effective method of acquiring the satellite without 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 *
Tx	29.0 – 31.0 GHz *

BUC Power 5W, 10W, 20W

Polarisation Circular, RH or LH

Local Oscillator

Rx	18.25GHz *
Tx	28.55GHz *

Local Oscillator Phase	@100Hz	-50dBc/Hz
Noise (Transmit)	@1KHz	-75dBc/Hz
	@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 optional

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

Environmental

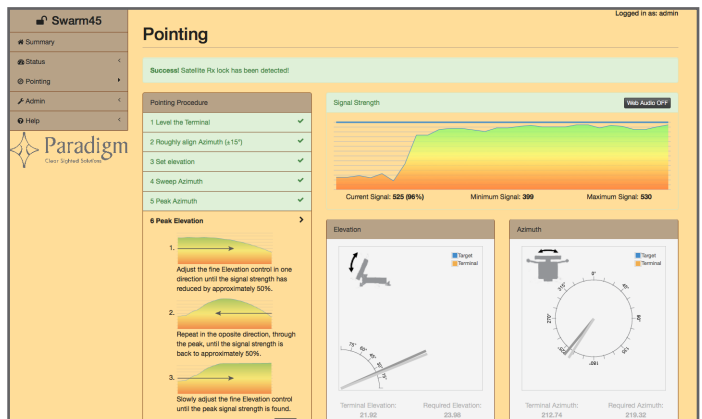
Ambient Operating Temperature

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.



Inmarsat Partner for Global Xpress Terminal Manufacturing and Integration

Paradigm is an approved **Inmarsat Global Xpress Terminal Manufacturer**, providing fixed and transportable land terminals in a range of antenna apertures up to 1.8m for commercial and government markets. Paradigm is also an approved **Inmarsat Global Xpress Terminal Integrator**, delivering complex value-added services to meet customers' demands for global coverage, seamless mobility and affordable high-speed broadband connectivity.