

The Holkirk Scarab a multi-Band and multi-Orbit satellite terminal, the ultimate solution for versatile and dynamic satellite communication.



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Seamless Frequency Band Transition

The Scarab terminal features the revolutionary Holkirk Quick Change Cartridge System, which allows users to switch between frequency bands (X-band, Ku-band, and Ka-band) with unprecedented ease. This modular design means cartridges can be swapped out in moments without tools or technical expertise, ensuring your communication systems are adaptable to any mission requirement.

Tracking Non-GEO Satellites

The Scarab terminal is engineered to track non-geostationary (non-GEO) satellite orbits, such as inclined orbit, HEO and MEO (Medium Earth Orbit), which are becoming increasingly important for high-throughput and low-latency communications. The terminal's advanced tracking capabilities ensure a stable and reliable connection even with satellites that move rapidly across the sky.

User-Friendly Operation

Designed with the end-user in mind, the Scarab terminals intuitive interface allows for quick setup and operation. Its portability and ease of use make it an ideal choice for field deployments, emergency response teams, and mobile command centres.

Control

The Scarab can be equipped with the Holkirk AIM MOBILE for seamless operation in Tri-Band operation with auto-sensing frequency band, 30 satellite database, BUC/TWT integrated M&C and graphical user interface.

Integration

The Scarab can form the heart of a secure communication network. With off-air monitoring, RF over fibre links and ruggedised electronics for LEO GEO MEO HEO satellite applications.

Applications

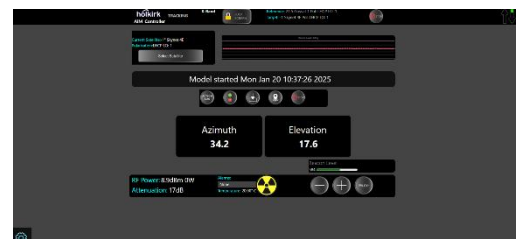
Tri-Band secure communications

Non-GEO orbit tracking

Inclined orbit tracking

TLE Input TRACKING

- X, Ku and Ka-Band
- GEO / MEO / HEO capable
- 60 / 80cm / 1.0m / 1.3M reflector
- Lightweight, high power
- Weatherproof complete system
- Up to 60W terminal power
- No-tools assembly
- Auto-Pointing with GPS
- GPS over-ride
- Fine adjustments on all axis
- Designed to meet MIL-STD 810g



M&C control includes LNB, BUC and ACU



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Terminal Specifications

Azimuth range	+/-60° (340° option dependent)		
Elevation range	0° to 90°		
Tracking speed			
Azimuth	fast	6° per second	
	Slow	1° per second	
Elevation	fast	6° per second	
	Slow	1° per second	
Auto-pointing	With GPS and GPS over-ride, TRACKING, TLE Input		
Power Input	90-250VAC and 24VDC		
Power consumption	Moving (with BUC/LNB)	60W	
	Idle (with BUC/LNB)	23W	
Terminal weight			
(uncased)	28kg (system dependant)		
Packing	Case 1	66x53x38cm	28.5kg (option dependent)
	Case 2	66x53x38cm	19.5kg (option dependent)
	Single case option (option dependent)		

Technical Information

Antenna size	60cm	80cm	1m	1.3M
X Band				
TX Frequency	7.9-8.4GHz	7.9-8.4GHz	7.9-8.4GHz	7.9-8.4GHz
RX Frequency	7.25-7.75GHz	7.25-7.75GHz	7.25-7.75GHz	7.25-7.75GHz
Gain TX	32.7 dBi	35.0 dBi	37.0 dBi	39.2 dBi
Gain RX	32.1 dBi	34.6 dBi	36.4 dBi	38.6 dBi
G/T	10.2 dB	12.7 dB	14.6 dB	16.8 dB
Pol	2 port Circular			
BUC power	40W	40W	40W	40W
KU Band				
TX Frequency	13.75-14.5GHz	13.75-14.5GHz	13.75-14.5GHz	13.75-14.5GHz
RX Frequency	10.7-12.75GHz	10.7-12.75GHz	10.7-12.75GHz	10.7-12.75GHz
Gain TX	37.2 dBi	39.6 dBi	41.4 dBi	43.3 dBi
Gain RX	35.7 dBi	38.3 dBi	40.1 dBi	42.0 dBi
G/T	14.33 dBk	16.84 dBk	18.77 dBk	21.05 dBk
Pol	2 port linear			
BUC Power	55W	55W	55W	55W
Ka Band				
TX Frequency	27.5-31.0GHz	27.5-31.0GHz	27.5-31.0GHz	27.5-31.0GHz
RX Frequency	17.7-21.2GHz	17.7-21.2GHz	17.7-21.2GHz	17.7-21.2GHz
Gain TX	43.2 dBi	45.7 dBi	47.6 dBi	49.5 dBi
Gain RX	40.2 dBi	42.6 dBi	44.5 dBi	47.1 dBi
G/T	15.88 dBk	18.38 dBk	20.78 dBk	22.93 dBk
Pol	2 port Circular			
BUC Power	20W/60W	20W/60W	20W/60W	20W/60W

