

SCORPION MAN-PACK

The Scorpion is a fully featured IP Manpack, designed to provide the ultimate in reliable, secure and mobile communications.

The Scorpion can be supplied in X, Ku or Ka-Band with reflector sizes; 60cm, 80cm, 1.0m, and 1.3m. All the frequency and size options can still be packed away in a single carry case with all the equipment required to uplink including, the pointing aid, cables and power supply.

The latest in manufacturing methods and material selection has allowed the Scorpion to provide the ultimate in man-pack terminals.

The elevation head is completely captive and houses all the RF components which have been specified to operate in extreme weather conditions. The entire unit is IP65 rated, all the RF connections and control are completely sealed so no dangling wires or connections to be made.

The base unit contains the tripod, which has cantilevered gas strut legs that raise the base of the unit 120mm off the ground, mitigating the ground effect heating and allows the Scorpion to be used in wet and muddy conditions.

The Man-Pack can be powered from either AC mains (110-240 (VAC), or direct from a DC source. We also have a battery pack option for our lower power terminals.

The Scorpion has the approval of several major commercial and military satellite operators including SES, GOVSAT and AIRBUS or use on SKYNET6.



- 60cm, 80cm, 1m, and 1.3m
- X, Ku and Ka-band
- Lightweight, weatherproof
- Up to 55W terminal power
- Integrated IP modem
- Out-of-band management

- No-tools assembly
- Single soft-case unit (under 19kg)
- Pointing assist
- GPS, compass and inclinometer
- Fine adjustments on all axis



Antenna Specifications

Antenna type	-	Carbon Fiber
Azimuth range (fine)	-	+/- 25°
Elevation range	-	0° to 90°
Operating humidity	-	95% RH
Operational wind speed	-	60km/hour (with ballast)
Storage Temperature	-	-40°C to +60°C
IP Interface	-	Weatherproof RJ45 connector
RX Monitor	-	SMA (female)
DC in (24v)	-	Weatherproof (battery option)
IP Modem	-	iDirect, Newtec, Teledyne, Q-flex, UHP, Comtech
Terminal Weight	-	Under 20Kg with soft cases (configuration dependent)
Packing Options	-	Backpack, hard case

Case (under 20Kg)



Technical Information

Antenna size	60cm	80cm	1m
Number of petals	6	5	7
F/D	0.25	0.25	0.25
X Band			
TX Frequency	7.9-8.4 GHz	7.9-8.4 GHz	7.9-8.4 GHz
RX Frequency	7.25-7.75 GHz	7.25-7.75 GHz	7.25-7.75 GHz
Gain TX	32.7 dBi	35.0 dBi	32.7 dBi
Gain RX	32.1 dBi	34.6 dBi	36.4 dBi
Pol 2 port Circular			
Axial Ratio	<0.75 dB	<0.75 dB	<0.75 dB
Isolation	>23 dB	>23 dB	>23 dB
TX/RX Port VSWR	<1.25:1	<1.25:1	<1.25:1
BUC power	40W	40W	40W
KU Band			
TX Frequency	13.75-14.5 GHz	13.75-14.5 GHz	13.75-14.5 GHz
RX Frequency	10.7-12.75 GHz	10.7-12.75 GHz	10.7-12.75 GHz
Gain TX	37.2 dBi	39.6 dBi	41.4 dBi
Gain RX	35.7 dBi	38.3 dBi	40.1 dBi
Pol 2 port linear			
Port to pol isolation	>35 dB	>35 dB	>35 dB
Cross pol	30 dB min	30 dB min	30 dB min
TX/RX Port VSWR	<1.5:1	<1.5:1	<1.5:1
BUC power	25W(55W)	25W(55W)	25W(55W)
Ka Band			
TX Frequency	29.0-31.0 GHz	29.0-31.0 GHz	29.0-31.0 GHz
RX Frequency	19.2-21.2 GHz	19.2-21.2 GHz	19.2-21.2 GHz
Gain TX	43.2 dBi	45.7 dBi	47.6 dBi
Gain RX	40.2 dBi	42.6 dBi	44.5 dBi
Pol 2 port Circular			
Axial Ratio	<0.75 dB	<0.75 dB	<0.75 dB
Isolation	>55 dB	>55 dB	>55 dB
TX/RX Port VSWR	Tx<1.25:1 Rx<1.5:1	Tx<1.25:1 Rx<1.5:1	Tx<1.25:1 Rx<1.5:1
BUC power	12W	12W	12W