

TP100

1.0M Ku/Ka Band Fly-away.

TP100 is the latest in the ultra-fast, quick deploy antenna system from Holkirk Communications.

The design includes a Ku or Ka Band BUC, 5 segment 1m high gain carbon fibre reflector, 'no-tools' assembly, folding feed arm assembly, quick deploy tri-pod, inclinometer and fine adjust on azimuth and elevation.

As part of an optional add-ons, the tri-pod has detachable sand feet to allow for ground anchors to be fitted ensuring maximum stability for reliable operation.

Once the antenna has been assembled (typically under 5 minutes) the satellite can be found using our MPAD3 hand held device which will assist in the pointing to any satellite. The MPAD has an integrated GPS, electronic compass and inclinometer that will give the user a target azimuth/elevation and polarisation position and actual read-out for the true position of all the axis.

The TP100 can be offered with a ruggedised IP modem. The IP modem will be attached to the rear of the antenna thus reducing the length of L-Band cables. There is space and weight budget to include the IP modem within the 2 off carry cases.

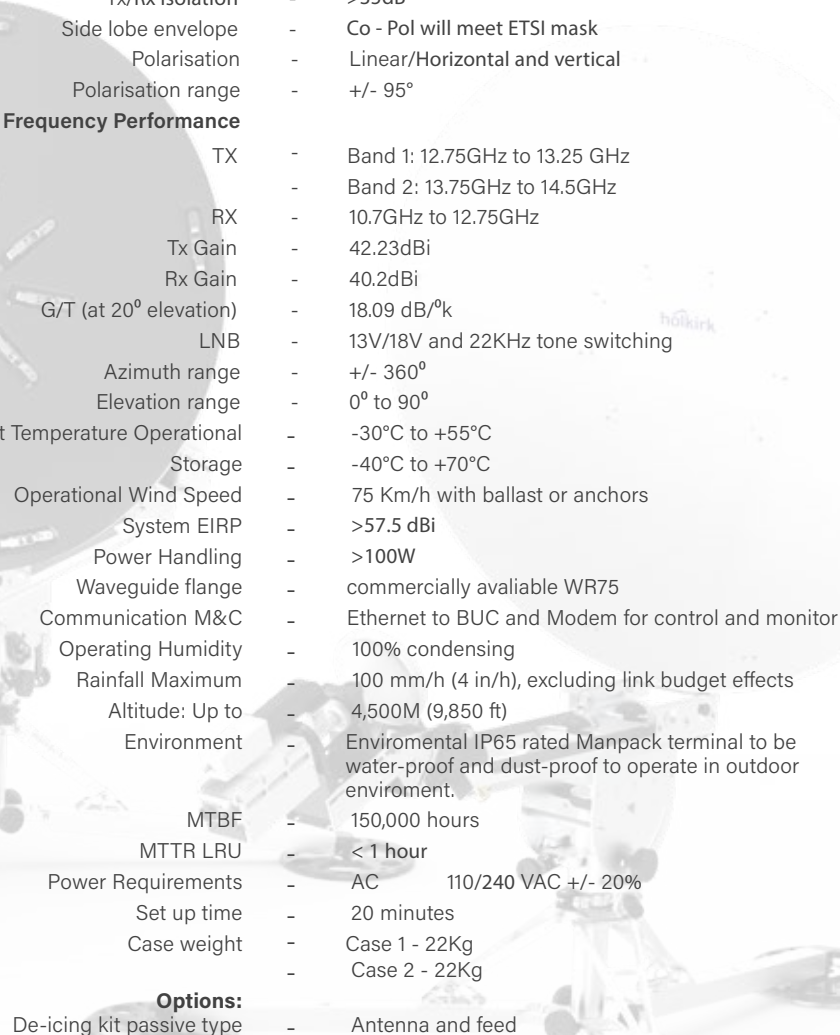


Once the antenna has been assembled (typically under 5 minutes) the satellite can be found by using our MPAD hand held device which will assist in the pointing to any satellite. The MPAD has an integrated GPS, electronic compass and inclinometer that will give the user a target azimuth/elevation and polarisation position and actual read-out for the true position of all the axis. The MPAD has a built-in signal strength meter to allow accurate peaking to the satellite.



- Quick deploy assembly (under 5 minutes)
- Compact and robust
- Built-in DVB-S2 receiver
- Manual over-ride on all axis
- 2 soft cases

Specifications



Antenna (HK 100/5S)	-	5 Segment, 1.0m carbon fibre reflector
Antenna construction	-	Carbon fiber
Radiation Patten	-	ITU-R 580.6
XPD		
on axis	-	>35dB
Within 1dB contour	-	>30dB
Tx/Rx isolation	-	>35dB
Side lobe envelope	-	Co - Pol will meet ETSI mask
Polarisation	-	Linear/Horizontal and vertical
Polarisation range	-	+/- 95°
Frequency Performance		
TX	-	Band 1: 12.75GHz to 13.25 GHz
	-	Band 2: 13.75GHz to 14.5GHz
RX	-	10.7GHz to 12.75GHz
Tx Gain	-	42.23dBi
Rx Gain	-	40.2dBi
G/T (at 20° elevation)	-	18.09 dB/°k
LNB	-	13V/18V and 22KHz tone switching
Azimuth range	-	+/- 360°
Elevation range	-	0° to 90°
Ambient Temperature Operational	-	-30°C to +55°C
Storage	-	-40°C to +70°C
Operational Wind Speed	-	75 Km/h with ballast or anchors
System EIRP	-	>57.5 dBi
Power Handling	-	>100W
Waveguide flange	-	commercially available WR75
Communication M&C	-	Ethernet to BUC and Modem for control and monitor
Operating Humidity	-	100% condensing
Rainfall Maximum	-	100 mm/h (4 in/h), excluding link budget effects
Altitude: Up to	-	4,500M (9,850 ft)
Environment	-	Enviromental IP65 rated Manpack terminal to be water-proof and dust-proof to operate in outdoor enviroment.
MTBF	-	150,000 hours
MTTR LRU	-	< 1 hour
Power Requirements	-	AC 110/240 VAC +/- 20%
Set up time	-	20 minutes
Case weight	-	Case 1 - 22Kg
	-	Case 2 - 22Kg
Options:		
De-icing kit passive type	-	Antenna and feed