

TP120 Flyaway Antenna

X, Ku and Ka-Bands



- Quick deploy assembly (under 5 minutes)
- No assembly tools required
- High gain carbon fibre reflector
- Light weight IATA compliant
- Compact and robust
- Full auto-pointing options
- SSPA/TWT integration
- X, Ku, Ka frequency band options



Compact flight cases for sample TP system. Other packaging options are available.

The TP120 antenna system from Holkirk is renowned for its compact size, lightweight and powerful performance which has been designed to excel in today's increasingly demanding DSNG market place.

Ease of Use

The user friendly modular design of the TP120 antenna allows for simple, fast and accurate location and acquisition of the satellite, either as a manually controlled mount or as a fully auto-pointing and motorised system, there are no tools required to assemble the TP120.

Versatile

The novel light weight and sturdy tripod design includes a truly versatile HPA cradle which can accommodate a wide range of third party HPA's up to 400W in X, Ku and Ka-bands, neatly doing away with the long lengths of fragile flexible wave-guide normally associated with flyaway systems.

Revolutionary

The main reflector is manufactured from high quality carbon fibre and is supplied in six easily assembled petals that employ a revolutionary spherical dowel locking mechanism to ensure perfect alignment.

Options

- High Stability LNB
- 3 axis job-controller
- Auto-pointing controller
- Incline orbit tracking controller
- 23kg weight packaging
- Sand shoes for extra stability
- Spectrum analyser

TP120 Flyaway Antenna

X, Ku and Ka-Bands



Technical Specifications

Antenna (HK 120/6S) 6 Segment, 1.2m carbon fibre reflector, prime focus offset with high quality mode matched feed for superior cross-pol performance

Side Lobe Performance 29-25 Log e dBi

Polarisation Performance XPD >35 dB

X-Band Performance

Receive

Polarisation Circular

Frequency band 7.250 to 7.75 GHz

Gain 37.53 dBi

Transmit

Polarisation Circular

Frequency band 7.9 to 8.4 GHz

Gain 37.85 dBi

Ku-Band Performance

Receive

Polarisation Linear

Frequency band 10,7 ~ 12,75 GHz

Gain @ 11.7 GHz 41.7 dBi

Transmit

Polarisation Linear orthogonal

Frequency band 13,75 ~ 14,5 GHz

Gain @ 14,25 GHz 43.5 dBi

Ka-Band Performance

Receive

The Rx antenna gain is defined at the Rx filter / LNB interface and includes the transmit reject filter loss.

Polarisation Circular

Frequency band 20.2 to 21.2 GHz

Gain @ 20 GHz 47.1 dBi

Gain @ 20.2 GHz: 46.2 dBi

Gain @ 20.5625 GHz: 46.35 dBi

Gain @ 20.925 GHz: 46.51 dBi

Gain @ 21.2 GHz: 46.62 dBi

Transmit

(The Tx antenna gain is defined at the Tx port OMT interface).

