

SANSA Space Operations

HBK-2

S-and Ext C-band antenna



Farm No. 502 JQ, District Krugersdorp

t +27 12 334-5000

f +27 12 334-5001

e tstrydom@sansa.org.za



HBK-2: S-and Ext C-band antenna

- Slew rate: 10°/sec
- Dish diameter: 12m
- Tracking mode: Program and Autotrack
- Polarisation: LCP and RCP

Receive

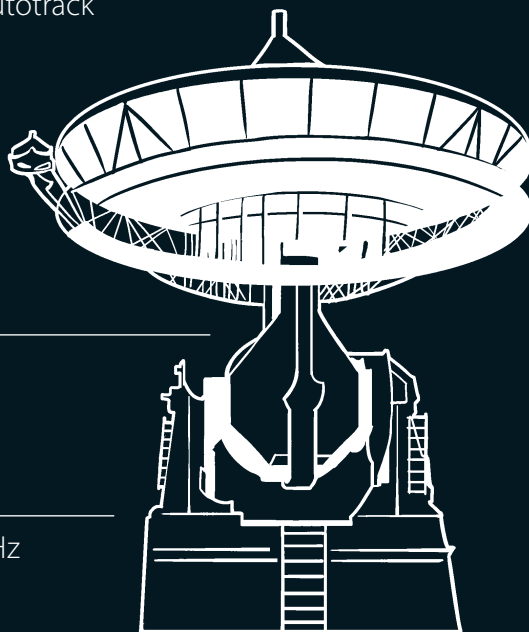
- Frequency range: 2.2–2.4 GHz
- G/T: 22.4 dB/K

Transmit 1

- Frequency range: 6.8–7.2 GHz
- EIRP: 88dBW

Transmit 2

- Frequency range: 2.025–2.12 GHz
- EIRP: 71dBW



SANSA Space Operations manages more than 22 antennas and a number of ground stations at its facility at Hartebeesthoek, South Africa. This includes the full-motion TT&C antennas and five remote sensing systems across all frequency bands and mobile support in S-band.

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tstrydom@sansa.org.za





SANSA Space Operations

HBK-5

S and X-band antenna

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HBK-5: S, X-band antenna

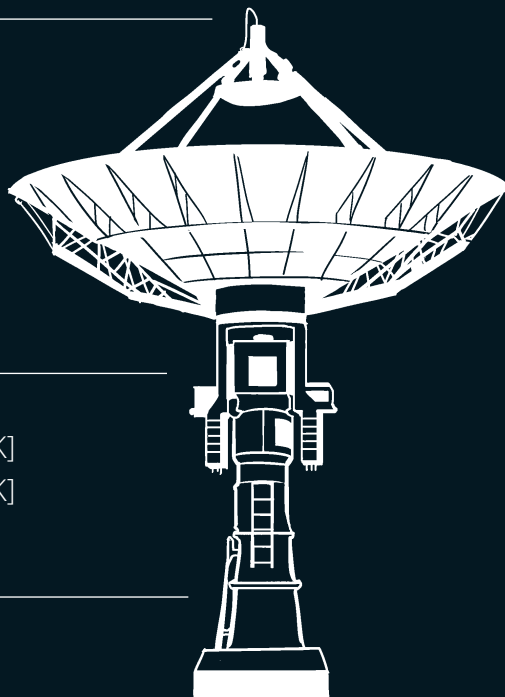
- Slew rate: 10°/sec
- Dish diameter: 10m
- Tracking mode: Program and Autotrack
- Polarisation: LCP and RCP

Receive

- Frequency range:
 - Rx1: 2.2–2.4 GHz [G/T: 22.4 dB/°K]
 - Rx2: 8.0–8.4 GHz [G/T: 31.0 dB/°K]

Transmit

- Frequency range: 2.025–2.10 GHz
- EIRP: 65dBW



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SANSA Space Operations

HBK-7

Ku/DBS-band antenna

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t +27 12 334-5000

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HBK-7: Ku/DBS-band antenna

- Slew rate: 2°/sec
- Dish diameter: 13.2m
- Tracking mode: Program and Autotrack
- Polarisation: Circular and Linear

Receive

- Frequency range: 10.95–12.75 GHz
- G/T: 38.25 dB/°K (@12.75 GHz)

Transmit

- Frequency range:
 - Tx1: 12.75–14.5 GHz EIRP: 91dBW
 - Tx2: 17.3–18.1 GHz EIRP: 92.6dB



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SANSA Space Operations

HBK-8

HBK-8: Ka-band antenna

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t +27 12 334-5000

f +27 12 334-5001

e tstrydom@sansa.org.za



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HBK-8: Ka-band antenna

- Slew rate: 2°/sec
- Dish diameter: 13.2m
- Polarisation: Circular and Linear
- Tracking mode: Program and Autotrack

Receive

- Frequency range:
17.7–21.2 GHz
- G/T: 41.8 dB/K
- Tracking frequency: 18.3 – 21.2 GHz

Transmit

- Frequency range:
 - Tx1: 27.5 – 30 GHz
EIRP: 93dBW
 - Tx2: 27.5 – 31 GHz
EIRP: 87dBW



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SANSA Space Operations

HBK-9

X-band antenna



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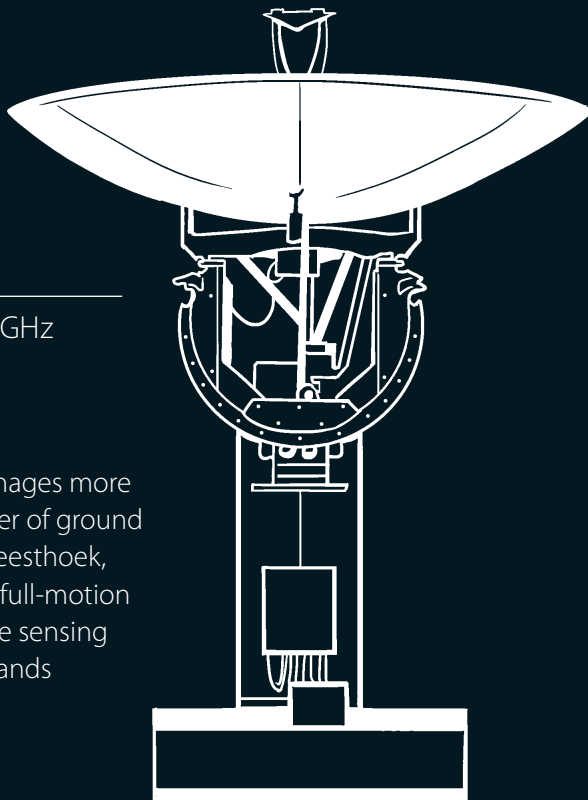
HBK-9: X-band antenna

- Slew rate: 3°/sec
- Dish diameter: 5.4m
- Tracking mode:
Program and
Autotrack
- Polarisation: RCP

Receive

- Frequency range: 8.0–8.5 GHz
- G/T: 30.5 dB/°K

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SANSA Space Operations

HBK-10

C-band antenna

designated Pre-15T by Intelsat)

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HBK-10: C-band antenna

(designated Pre-15T by Intelsat)

- Slew rate: 5°/sec Azimuth, 1.4°/sec Elevation
- Dish diameter: 11m
- Tracking mode: Program and Autotrack
- Polarisation: Circular

Receive

- Frequency range:
3.625–4.2 GHz
- G/T: 31.7 dB/°K

Transmit

- Frequency range:
5.85 - 6.425 GHz
- EIRP: 89.5dBW



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SANSA Space Operations

HBK-16

X-band antenna

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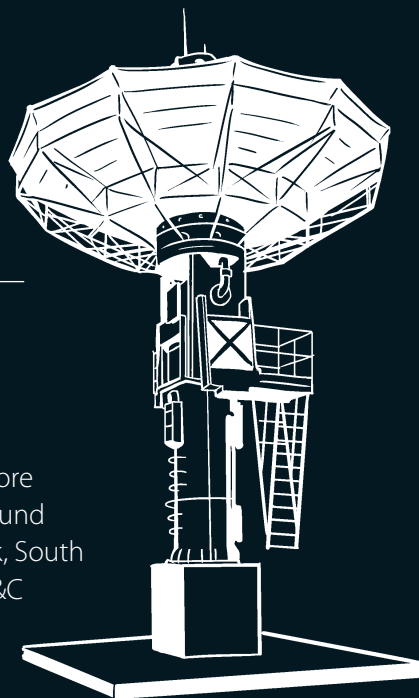
HBK-16: X-band antenna

- Slew rate: 3°/sec
- Dish diameter: 7.3m
- Tracking mode: Program and Autotrack
- Polarisation: LCP and RCP

Receive

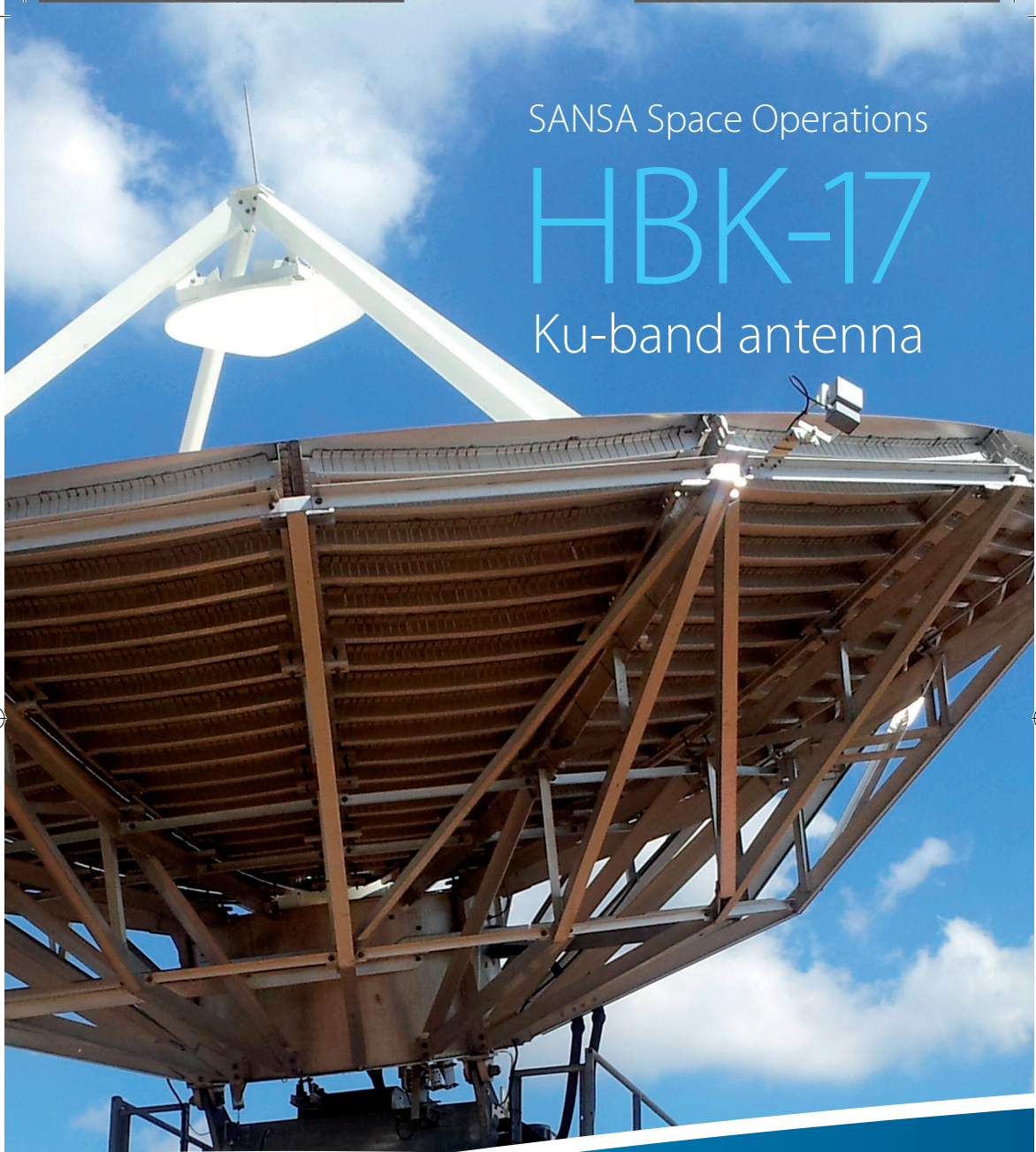
- Frequency range: 8.0–8.5 GHz
- G/T: 32.2 dB/°K

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SANSA Space Operations

HBK-17

Ku-band antenna

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HBK-17: Ku-band antenna

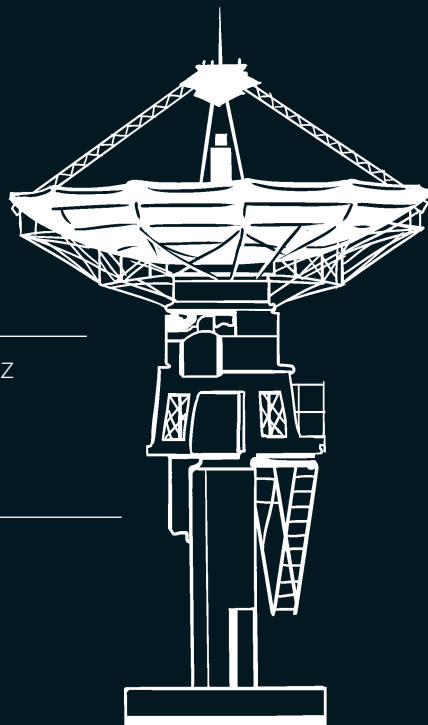
- Slew rate: 2°/sec
- Dish diameter: 9m
- Tracking mode: Program and Autotrack
- Polarisation: Linear and Circular

Receive

- Frequency range: 10.95–12.75 GHz
- G/T: 35 dB/K

Transmit

- Frequency range:
 - 12.75 – 14.5 GHz
 - 17.3 – 18.1 GHz
- EIRP: 85dBW



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SANSA Space Operations

MO-1

S Band Mobile antenna

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MO-1: S Band Mobile antenna

- Slew rate: 20°/sec
- Dish diameter: 15ft
- Tracking mode: Program and Autotrack
- Polarisation: LCP and RCP

Receive

- Frequency range: 2.2 – 2.4 GHz
- G/T: 11.6 dB/°K



SANSA Space Operations manages more than 22 antennas and a number of ground stations at its facility at Hartebeesthoek, South Africa. This includes the full-motion TT&C antennas and five remote sensing systems across all frequency bands and mobile support in S-band.

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