

1. Main technical indicators

1.1 Electrical performance indicators

- (1) Reflector size and type: 1.2m Prime Focus, Offset Feed, SMC
- (2) VSWR: 1.3:1
- (3) Feed Type: Linear Cross POL
- (4) Frequency: Rx: 10.7~ 11.8 GHz
Tx: 12.75~13.25 GHz
- (5) Gain: Rx: $\geq 40.7 + 20 \lg (f/10.825)$ dBi
Tx: $\geq 41.8 + 20 \lg (f/13.00)$ dBi
- (6) Cross polarization isolation ≥ 35 dB (axial)
- (7) Port isolation: Transmitting and receiving ≥ 40 dB (power amplifier output port),
Transmitting and receiving ≥ 85 dB (field amplifier input port)
- (8) Standing-wave ratio: Rx: ≤ 1.4
Tx: ≤ 1.3
- (9) First sidelobe: ≤ -14 dB
- (10) Interface type: Dual port WR75

1.2 Performance index

- (1) Azimuth motion range and speed: $\pm 200^\circ$; 0.1~2.5 °/s
- (2) Elevation motion range and speed : $10^\circ \sim 90^\circ$; 0.1~2.5 °/s
- (3) Polarization motion range and speed: $\pm 90^\circ$; 0.1~6 °/s
- (4) Automatic star capture time: ≤ 3 min
- (5) Star alignment method: beacon
- (6) Star alignment accuracy: 0.3dB (R.M.S)
- (7) Positioning method: GPS

1.3 Environmental adaptability indicators

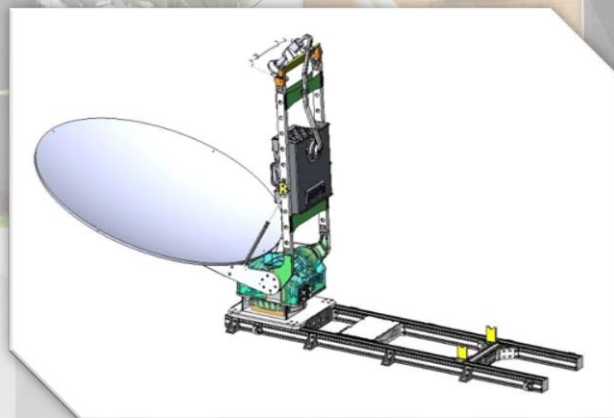
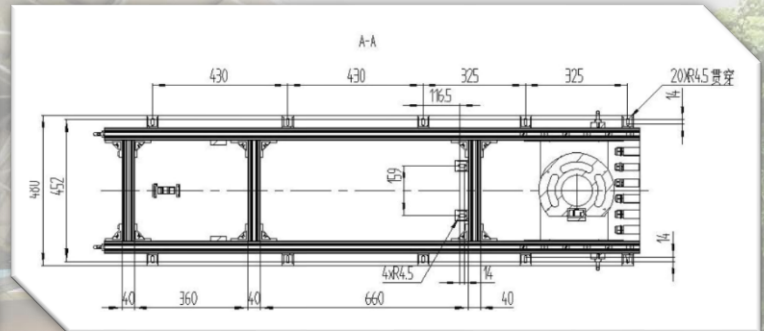
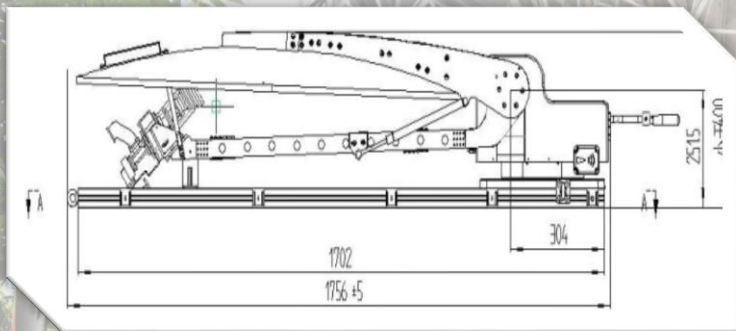
- (1) Operation temperature:
Outdoor part: $-10^\circ\text{C} \sim +55^\circ\text{C}$
Indoor part: $-20^\circ\text{C} \sim +55^\circ\text{C}$
- (2) Storage temperature:
Outdoor part: $-10^\circ\text{C} \sim +65^\circ\text{C}$
Indoor par: $-40^\circ\text{C} \sim +65^\circ\text{C}$
- (3) Work wind speed: 72 km/hr (45 mph)
- (4) Survival wind speed: 115 km/hr (70 mph)
- (5) Humidity requirements: 95% (20 °C)
- (6) IP Grade: IP65

1.4 Other indicators

- (1) Power supply: 220VAC \pm 10%, 50Hz
- (2) System power consumption: \leq 350 W (excluding power amplifier, in a calm state)
- (3) System weight: \leq 80 Kg (excluding power amplifier, LNB, packaging and accessories, etc.)
- (4) Amplifier power supply: separate power supply
- (5) LNB power supply: system feeding
- (6) Controller type: 1U chassis

2. Loading requirements

The dimensions of the product loading interface are shown in the figure, with length x width x height less than 1761x1210x400mm.



TECHSTAR SATCOM

Head Office: USA
402 N Nursery Rd, Irving, TX 75061
United States of America (USA)
Email: info@starsatcom.com
Web: starsatcom.com

Regional Office: Singapore
10 Anson Road, #22-02 International Plaza, Singapore 079903
Email: info@starsatcom.com, Web: starsatcom.com

Regional Office: UAE (Dubai)
Unit 18, Phase 01, LIU (Light Industrial Unit), Dubai Silicon Oasis, Dubai, UAE
Email: info@starsatcom.com, Web: starsatcom.com