

2.4 米地面站



产品概述

维萨特 2.4 米地面站提供卓越的性能，频段包含从 L 波段到 Ka 波段，既可用于单独接收，又可用于卫星通信收发，均可提供高性能。天线面板部件采用精密成型面板，采用模具化生产、尺寸统一，批量性能稳定，各部件损伤可重新更换。具有创新的修正型卡塞哥伦或是环焦馈源和幅面设计，实现了高增益，低噪声温度，更高的天线性能和良好的噪声和微波干扰抑制。大中心筒为设备安装提供了足够的空间。面板由镀锌的 Az/EI 立柱座架提供支撑，更完美的实现了天线指向和跟踪精度所要求的力度。立柱按照全轨道电弧覆盖设计，可在地面和屋顶安装。

产品特点

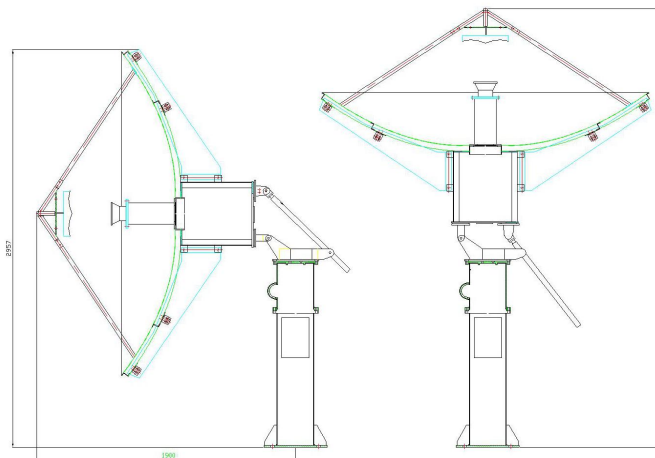
- *满足CCIR 580和INTELSAT要求
- *出厂前调试，安装时无需经纬仪
- *高精度合金铝材主面
- *电镀喷锌，外层白漆
- *线/圆极化可换馈源
- *高射频性能
- *不锈钢五金件镀锌
- *多种天线馈源频段选项
- *实现旋转底座Ka波段天线
- *多重防腐处理

选项

- *L, S, X, Ka 频段，多频段
- *根据客户要求定制馈源
- *扩展C圆800MHz可用
- *全动天线
- *除冰系统：馈源吹雨以及电动除冰系统
- *极化：线极化，圆极化馈源
- *两端口或是四端口线/圆极化馈源
- *天线控制器以及跟踪接收机，ODU 支撑套件
- *沿海增加表面镀锌层厚度

天线附件

- *电动部件
- *限位开关
- *馈源出厂测试及报告
- *海运/空运运输包装
- *天线地基
- *接地套件，电缆安装套件



天线技术指标

| 电气指标 Electrical Specification | | | | | | | | | | |
|---|--|----------|---------------------|----------|--------------------|----------|--------------------|----------|--------------------|----------|
| 天线 Type | C24T | | EC24T | | IC24T | | K24T | | DBS24T | |
| 频段 Operating Frequency, GHz | Standard C band | | Extended C band | | Insat C band | | Ku Band | | DBS Band | |
| | Receive | Transmit | Receive | Transmit | Receive | Transmit | Receive | Transmit | Receive | Transmit |
| 增益 Gain, Mid-band, dBi | 38.0 | 41.9 | 37.7 | 42.1 | 39.5 | 42.9 | 47.7 | 49.1 | 47.7 | 51.2 |
| 极化 Polarization | Linear/Circular | | Linear/ Circular | | Linear/ Circular | | Linear | | Linear | |
| 交叉极化 XPD(on Axis), dB(Linear) | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 |
| 1dB 波束带宽交叉极化 XPD across 1dB Beam Width, dB(Linear) | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| 轴比 Axis Ratio, dB (circular) | 2 | 0.75 | 2 | 0.75 | 2 | 0.75 | / | / | / | / |
| 驻波比 VSWR | 1.30 | 1.30 | 1.30 | 1.30 | 1.30 | 1.30 | 1.30 | 1.30 | 1.30 | 1.30 |
| 天线噪声温度 Antenna Noise Temperature (2 Port Feed) | | | | | | | | | | |
| 10° Elevation | 32K | | 31K | | 33K | | 48K | | 48K | |
| 30° Elevation | 24K | | 23K | | 26K | | 38K | | 38K | |
| 50° Elevation | 20K | | 20K | | 23K | | 34K | | 34K | |
| -3DB 波束带宽-3 dB Beam Width, Mid-band | | | | | | | | | | |
| G/T 值 Typical G/T (EL=10°) | 19.8dB/K (30KLNA) | | 19.5dB/K (30K LNA) | | 21.2dB/K (30K LNA) | | 26.7dB/K (70K LNA) | | 26.7dB/K (70K LNA) | |
| 功率容量 Tx. Power Capability, KW | 1 | | 1 | | 1 | | 1 | | 1 | |
| 接口形式 Feed Interface | CPR-229F | CPR-137F | CPR-229F | CPR-137F | CPR-229F | CPR-137F | WR-75 | WR-75 | WR-75 | WR-62 |
| 馈源插损 Feed Insertion Loss,dB | 0.3 | 0.25 | 0.3 | 0.25 | 0.3 | 0.25 | 0.3 | 0.25 | 0.3 | 0.25 |
| 隔离 Isolation, Tx to Rx, dB | 85 | | 85 | | 85 | | 85 | | 85 | |
| 旁瓣 Sidelobe | CCIR 580-5 | | | | | | | | | |
| 机械性能 Mechanical Specification | | | | | | | | | | |
| 天线口径 Antenna Diameter | 2.4m | | | | | | | | | |
| 天线类型 Antenna Type | Ring Focus | | | | | | | | | |
| 表面精度 Surface Accuracy (RMS) | ≤0.35mm | | | | | | | | | |
| 面板制造 Reflector Construction | 8 precision-formed aluminum panels with heat-diffusing white paint, Hot spray galvanized back structure. | | | | | | | | | |
| 天线座架型式 Mount type | Kingpost pedestal | | | | | | | | | |
| 转向工作范围 Antenna Pointing Range | Azimuth | | 0°~360°(Continuous) | | | | | | | |
| | Elevation | | 0°~90°(Continuous) | | | | | | | |
| | Polarization | | ±90°(Continuous) | | | | | | | |
| 驱动模式 Drive Mode | | | Manual/ Motorized | | | | | | | |
| 电动驱动系统 Motor Drive System | Azimuth Travel Rate | | 0.03°/S | | | | | | | |
| | Elevation Travel Rate | | 0.04°/S | | | | | | | |
| | Polarization Travel Rate | | 1°/S | | | | | | | |
| 环境特性 Environmental Specification | | | | | | | | | | |
| 工作风速 Operational Wind | 72km/h gusting to 97km/h | | | | | | | | | |
| 生存风速 Survival Wind | 200km/h(at zenith) | | | | | | | | | |
| 环境温度 Temperature | -40°~+60° | | | | | | | | | |
| 相对湿度 Relative Humidity | 100% | | | | | | | | | |
| 太阳辐射 Solar Radiation | 1135Kcal/h/m² | | | | | | | | | |

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| 地震 Seismic(Survival) | 0.3g(H), 0.15g(V) |
| 积冰 Ice Loading | 13mm Operational; 25mm Survival |