



## **DESCRIPTION**

Model SNF-L-0.4 is a roll over azimuth spherical near field measurement system. It is composed by four axes including theta, phi, pol rotation axes and offset linear slide. It is ideal for measuring low to medium gain antennas from 1 to 50GHz. The system is constructed of high strength aluminium and can support maximum AUT weight up to 7kg. The system is designed as a kit in which each subsystem is easy to assemble, align. An optional floor slide can be added to convert the near field measurement into direct far field measurement.

# **FEAUTRES**

- Cover from 1GHz to mmWave frequency range up to 50GHz
- Full spherical scan capability
- Automatic scan and control setup
- Paired with optional viewing and analysis software
- Far field and near field patterns

# **TYPICAL APPLICATIONS**

- Small cell Base station antenna
- Patch Arrays
- General broad pattern antennas
- Lens antennas
- Millimeter wave Antennas and arrays



# **SPECIFICATIONS**

## **Positioning System**

AUT Positioner	Roll over Azimuth spherical scanning
Max AUT Diameter	400mm
Max AUT Weight	7kg <sup>1</sup>
Probe Positioner (optional)	Automatic Polarization rotation 10kg maximum load
Phase Offset Slider (manual)	300mm offset capability
Repeatability	0.1° RMS
Resolution	0.05°
Scan Speed	10/30/30° per second theta/phi/pol
Position Controller	Ascan Controller, Plug and Play connection cable 6m
Slip Ring (optional)	12 Contact 5A
Absorber kit	150mm/100mm pyramidal
Frequency Range	1-50GHz
RF System	
AUT Positioner RF cables	18, 26.5, 40, 50GHz
(optional)	
Rotary Joint (optional)	18, 40, 50 GHz (Phi, Theta, Pol)
Range RF cables (optional)	18, 26.5, 40, 50 GHz
VNA compatibility	Keysight and R&S (other VNA please contact Ascan)
Weights and Dimensions	
Installation Envelope W×L×H	1m height ×XXX long×0.6 m wide <sup>2</sup>

1. The maximum payload/weight depends on the shape of the AUT, stated as maximum weight when gravity centre of AUT is at the rotation centre of roll axis.

2. Length can be adjusted based on customer's space and requirement.



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## **DELIVERABLES**

#### Positioning and Scanning subsystem

- Roll over azimuth scanner
- Phase centre offset slider
- Absorber kit

#### **Motion Control**

- Ascan controller
- Controller cables
- Ascan FieldScanner-- control and data acquisition software

#### **RF** subsystem

• Positioner cable

#### **Site Deliverables**

- Hardware, system and software manual
- Anchoring kit
- Shipping crates

# **OPTIONS AND ACCESSORIES**

### Software add-on

Spatial digital filter

### **RF Components**

Waveguide probe and its fixtures Standard gain horn and associated fixtures Mmwave RF installation kit for mmWave VNA extension module 50GHz-110GHz Range RF cable (optional) Rotary joint—theta, phi and pol axes (optional) Probe tower

### Additional scanning modes

Floor slide Planar scanner Cylindrical scanner

**On Site Services** Installation Training

Notes: This datasheet is not used as a contractual document. It is a general introduction of the system. Please contact Ascan for more information.

