

## **Antenna Product Specifications**

#### **SLG0352SS27N**

0.3m High Performance Low Profile Antenna, dual-polarized, 5.25÷5.85 GHz



#### **CHARACTERISTIC**

#### **General Specifications**

Antenna Type High Performance Low Profile Antenna,

**Dual-Polarized Antenna** 

Diameter, nominal 0.3m / 1ft

Polarization Dual

Reflector Construction One-piece reflector

Antenna Color RAL7035
Radome Color RAL7047
Radome Material Description ABS

### **Electrical Specifications**

Frequency 5.25÷5.85GHz

Gain, Top 23.9 dBi Gain, Mid 23.4 dBi Gain, Low 22.9 dBi Front-to-Back Ratio 44 dB Cross Polar Discrimination (XPD) 30 dB 9.9° Beamwidth Isolation 35 dB **VSWR** 1.80 Return Loss 10.881 dB



Regulatory Compliance ETSI EN 302 217 Range 1 Class 2

### **Mechanical Specification**

Wind Velocity Operational 200 km/h Wind Velocity Survival Rating 250km/h

Fine Azimuth Adjustment Coarse 360° Fine ±15° Fine Elevation Adjustment Coarse ±25° Fine ±15°

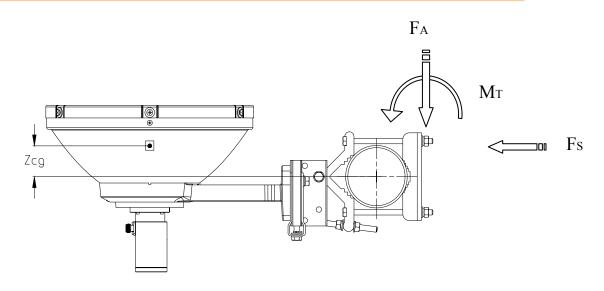
Mounting Pipe Diameter Φ51÷Φ114 mm

Side Struts, Included 0
Net Weight 8.2 kg

### Wind Forces at Wind Velocity Survival Rating

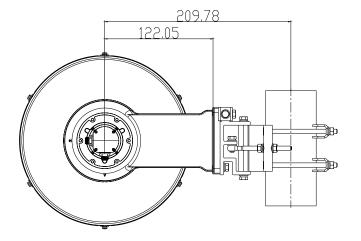
Axial Force(FA) 430 N
Side Force(FS) 235 N
Twisting Moment(MT) 180 N • m
Zcg without Ice -3 mm
Zcg with 1"(25.4mm) Ice 19 mm
Weight with 1"(25.4mm) Ice 15.0 kg

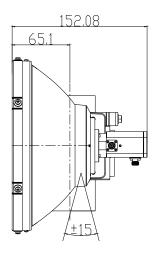
# Wind Forces at Wind Velocity Survival Rating Image

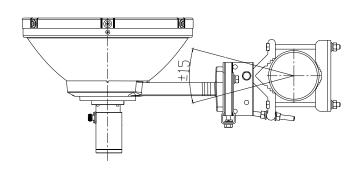




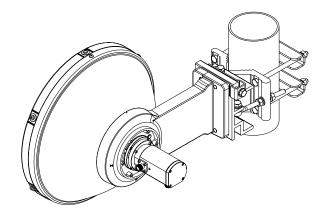
# **Antenna Dimensions and Mounting Information**







Fine Azimuth Adjustment



Fine Elevation Adjustment

# **Mechanical Torque**

Diameter of screw4 mm10 mmTorque Value0.9 N • m22 N • m



### **RoHS Compliance**

This product and its packaging are compliant to the DIRECTIVE 2002/95/EC of the EUROPEAN PARLIAMENT and of the COUNCIL of 27 January 2003 (RoHS) on the restriction of the use of hazardous substances as defined on RoHS Directive.

#### **Footnotes**

Axial Force (FA)	Maximum forces exerted on a supporting structure as a result of wind from the most critical direction for this parameter. The individual maximums specified may not occur simultaneously. All forces are referenced to the mounting pipe.
Cross Polarization	The stated unit is dB. It is refer to the difference of levels between co-polar and cross-polar within
Discrimination (XPD)	range of 3dB BW.
Front to Back Ratio	It refers to the ratio between peak level and the lowest back lobe at $180^{\circ}\pm60^{\circ}$ ; The F/B Ratio of existing products are unable to exceed 2dB as
	against stated values unless other specific declarations.
Gain, Mid Band	It denotes the gain of centre frequency in operated frequency band. The average value of stated three frequencies at mid-band as well as bottom and top
Half-Power BW	frequency bands is gain of antenna.  Denote the nominal total width of main beam at the -3dB points.
Operating Frequency Band	Bands correspond with ITU-R recommendations or common allocations used throughout the world. Other ranges can be accommodated on.
Packing	Standard packing is suitable for export. Antennas are shipped as standard in totally recyclable material.
Radiation Pattern Envelope Reference (RPE)	Radiation patterns determine an antenna's ability to discriminate against unwanted signals under conditions of radio congestion. Radiation patterns are dependent on antenna series, size, and frequency.



Return Loss The figure that indicates the proportion of radio

waves incident upon the antenna that are rejected

as a ratio of those that are accepted.

Side Force (FS) Maximum axial forces exerted on support

structures by side struts as a result of a 240 km/h wind from the most critical direction and extreme angle permitted. The forces are a component of, not in addition to, the maximum forces specified

above.

Twisting Moment (MT) Maximum forces exerted on a supporting structure

as a result of wind from the most critical direction for this parameter. The individual maximums specified may not occur simultaneously. All forces

are referenced to the mounting pipe.

VSWR Refer to the maximum Voltage Standing Wave

Ration in frequency band of operation.

Wind Velocity Operational The antenna axis deflection is less than one third

of the half power beam width at the highest

frequency which occurs.

Wind Velocity Survival Rating The antenna sub-system will survive the specified

survival wind speed without any permanent

deformation or change of shape.