Flat Panel Array Antenna
27-31 GHz

Product Datasheet

PAN-7053-64-KA
Ka-band Flat Panel Array Antenna.

Overview
The PAN-7053-64-KA flat panel technology developed by ReliaSat is a high-performance solution for modern communication systems.

It can be used for satellite and 5G communication systems, offering a high data rate throughput system. The antenna has a small profile and flat geometry, this technology enables wide operational bandwidth, good polarization purity and high gain in accordance with customer needs. The board is composed of 3 layers.

Features
- 27-31 GHz frequency range
- 29 GHz center frequency
- Polarization RHCP
- Fits cubesats

Applications
- Satellite communications
- Ground - satellite - ground communications (circular polarization)*
- 5G
- High data rate throughput system

Connector Type	Polarization
70 x 53 K-type vertical connector	RHCP

Information furnished by ReliaSat is believed to be accurate. No responsibility is assumed by ReliaSat for its use, nor for any infringements on the rights of other parties that may result for the use of the information herein. All specifications are subject to change without notice.

Flat Panel Array Antenna
27-31 GHz

ReliaSat™

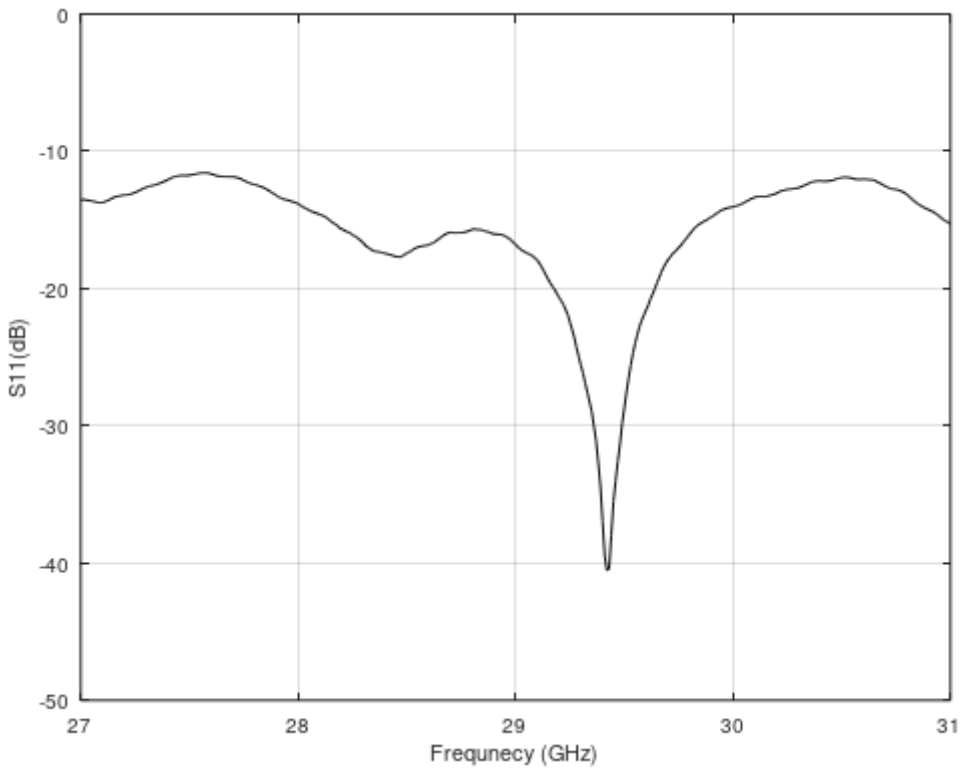
Product Datasheet

FPA Specification

Parameter	Value	Unit
Centre Frequency	29	GHz
Matching Frequency Range	27-31	GHz
Polarization	RHCP	
Gain (at central frequency)	20	dBi
3 dB Beamwidth (at central frequency)	10	Degree
Connector	K (rear mounted)	
Impedance	50	Ohm
Dimension	70 x 53	mm

Measurement Results

Return Loss (S_{11})

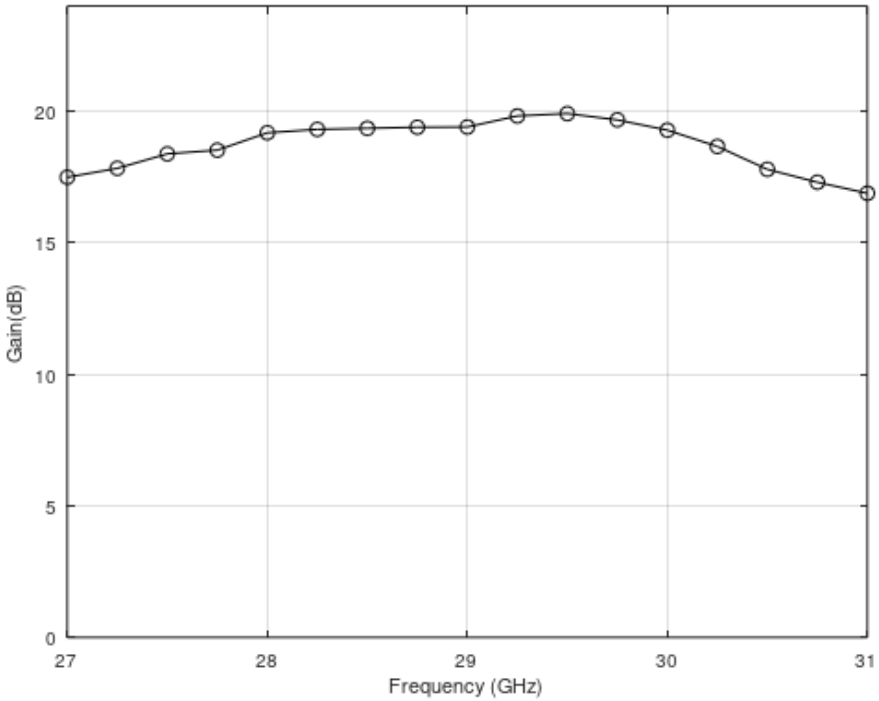


Information furnished by ReliaSat is believed to be accurate. No responsibility is assumed by ReliaSat for its use, nor for any infringements on the rights of other parties that may result for the use of the information herein. All specifications are subject to change without notice.

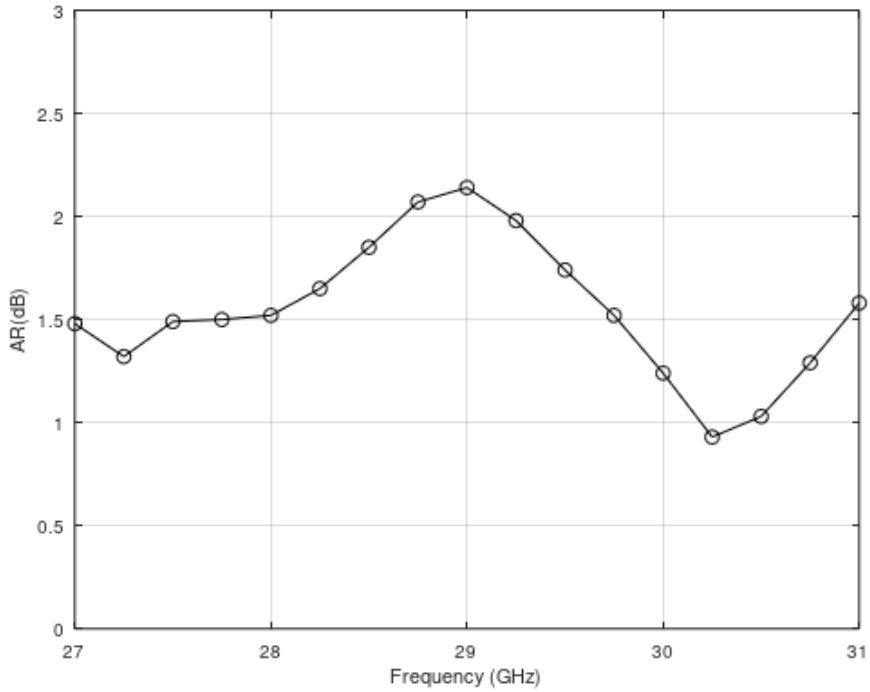
Flat Panel Array Antenna
27-31 GHz

Product Datasheet

Gain

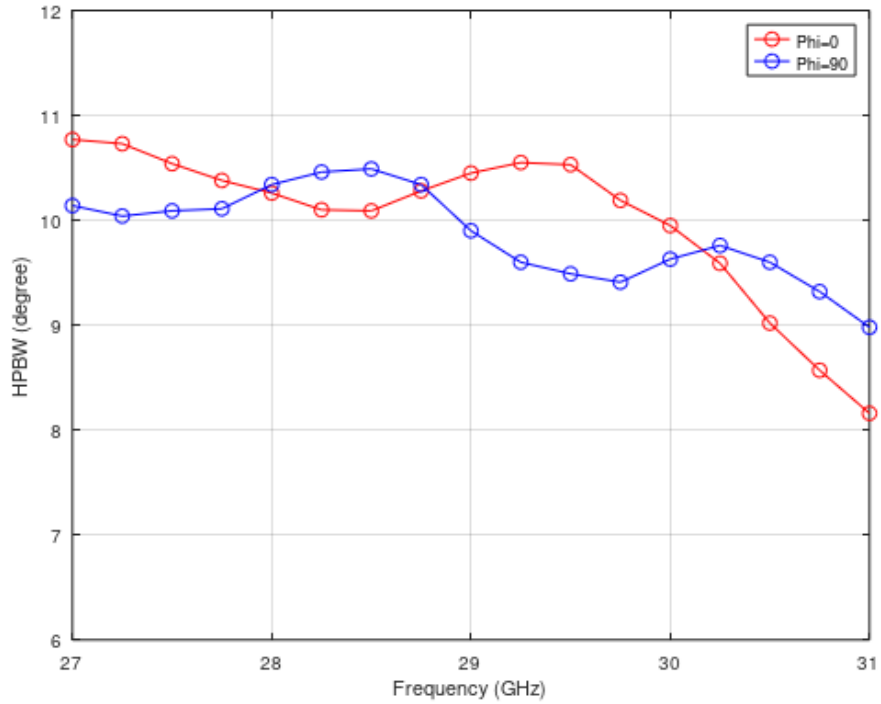


AR (Axial Ratio)

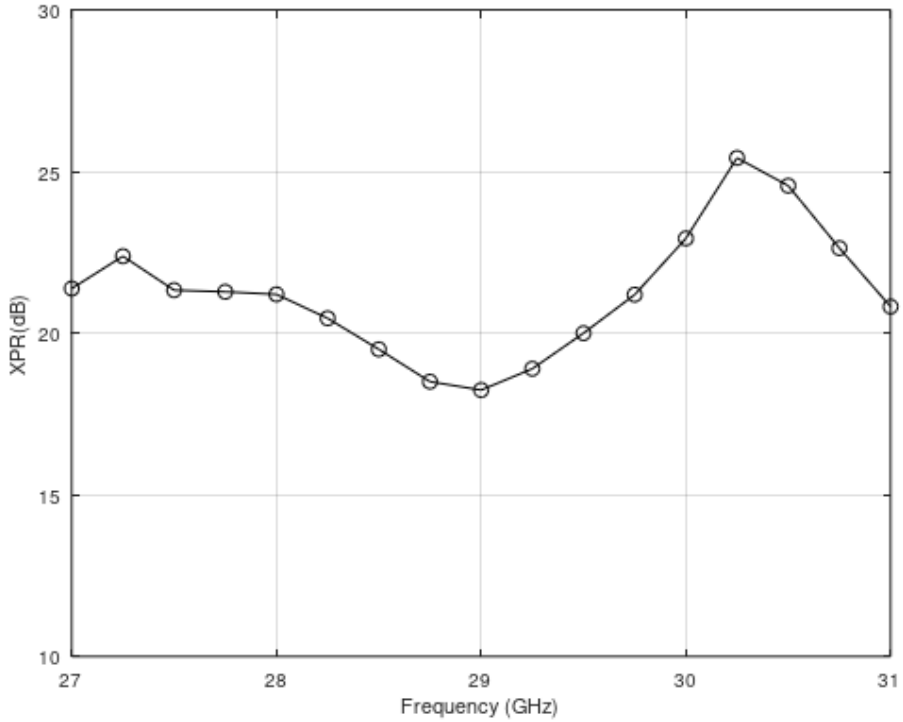


Information furnished by ReliaSat is believed to be accurate. No responsibility is assumed by ReliaSat for its use, nor for any infringements on the rights of other parties that may result for the use of the information herein. All specifications are subject to change without notice.

HPBW (Half Power Beamwidth at Phi=0 & Phi=90)



XPR (Cross Polarization Ratio)



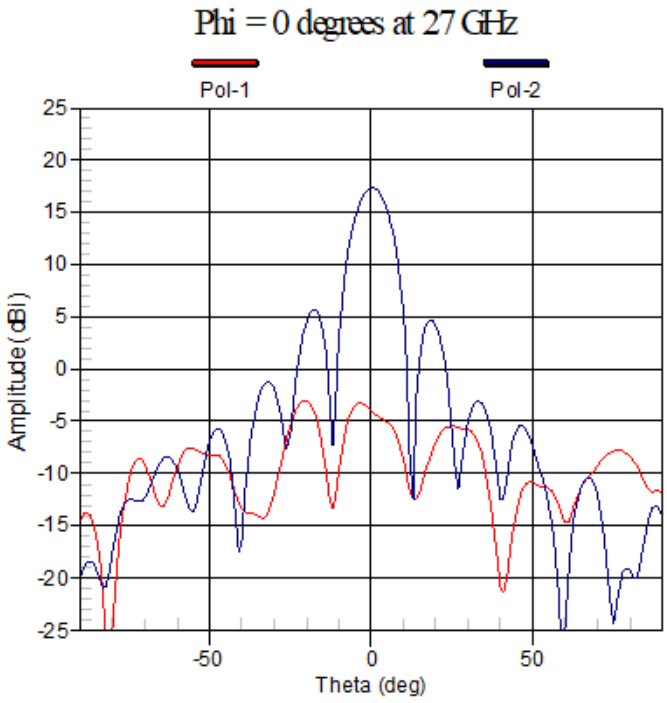
Information furnished by ReliaSat is believed to be accurate. No responsibility is assumed by ReliaSat for its use, nor for any infringements on the rights of other parties that may result for the use of the information herein. All specifications are subject to change without notice.

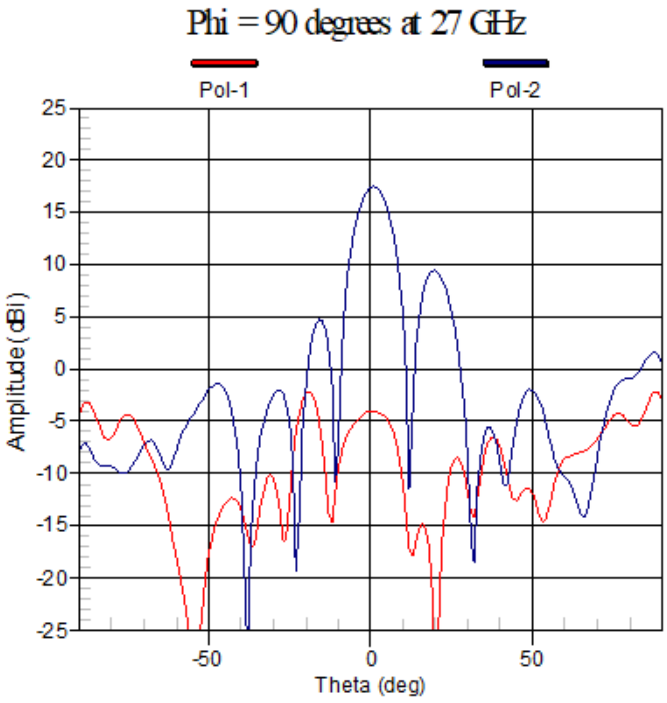
Flat Panel Array Antenna

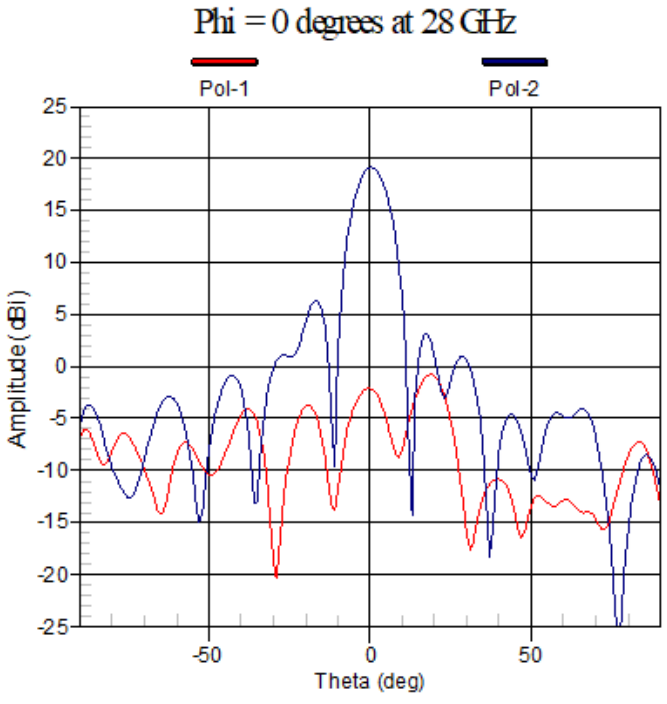
27-31 GHz

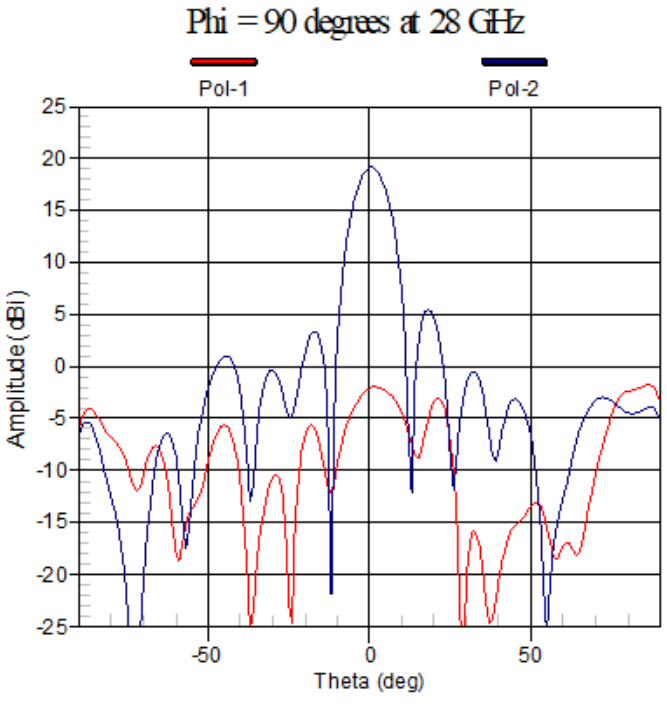
Product Datasheet

Radiation Pattern







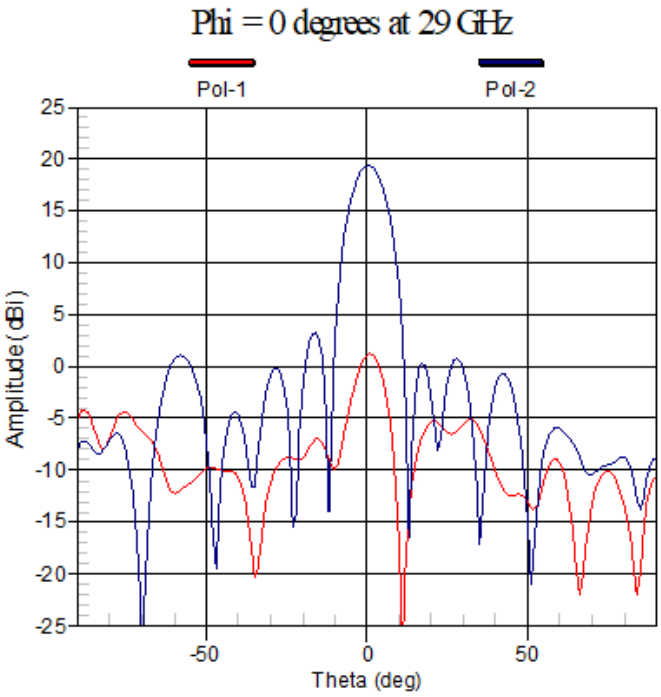


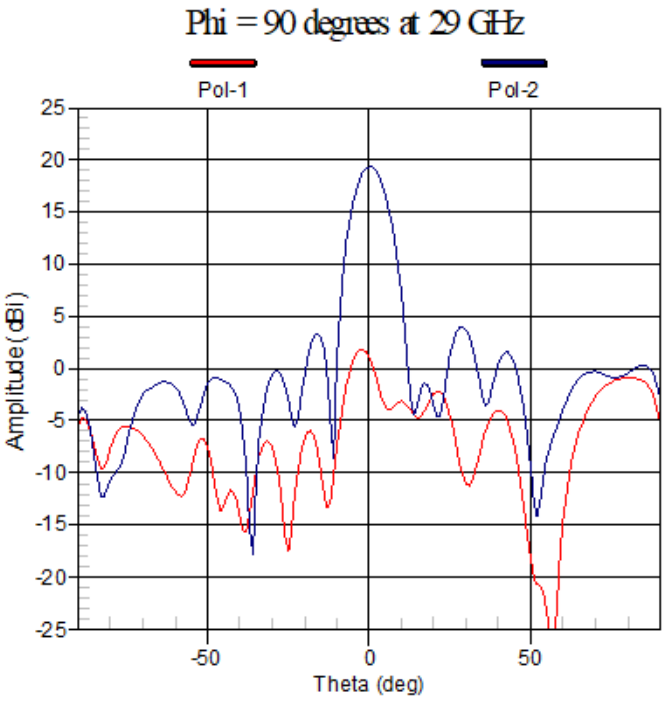
Information furnished by ReliaSat is believed to be accurate. No responsibility is assumed by ReliaSat for its use, nor for any infringements on the rights of other parties that may result for the use of the information herein. All specifications are subject to change without notice.

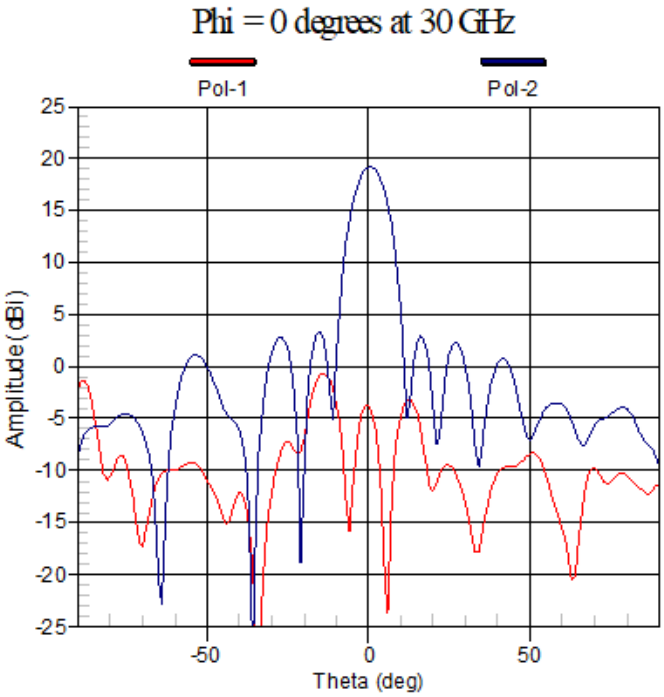
Flat Panel Array Antenna

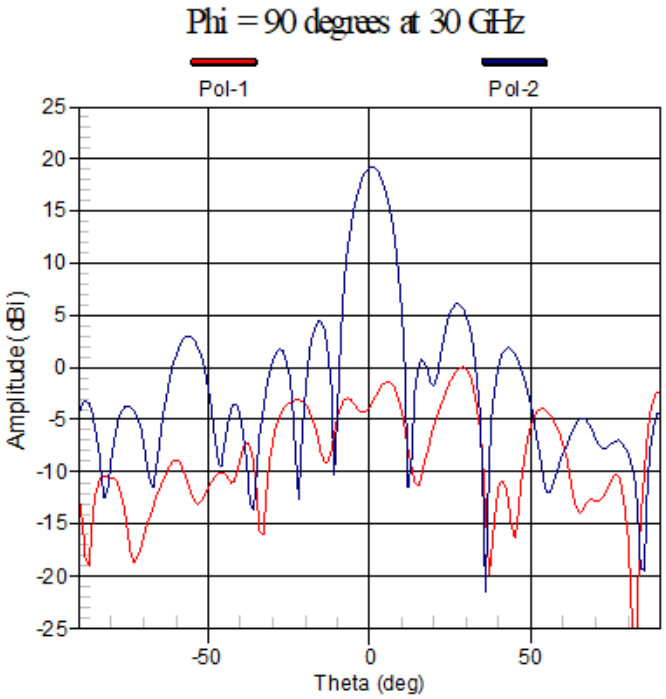
27-31 GHz

Product Datasheet







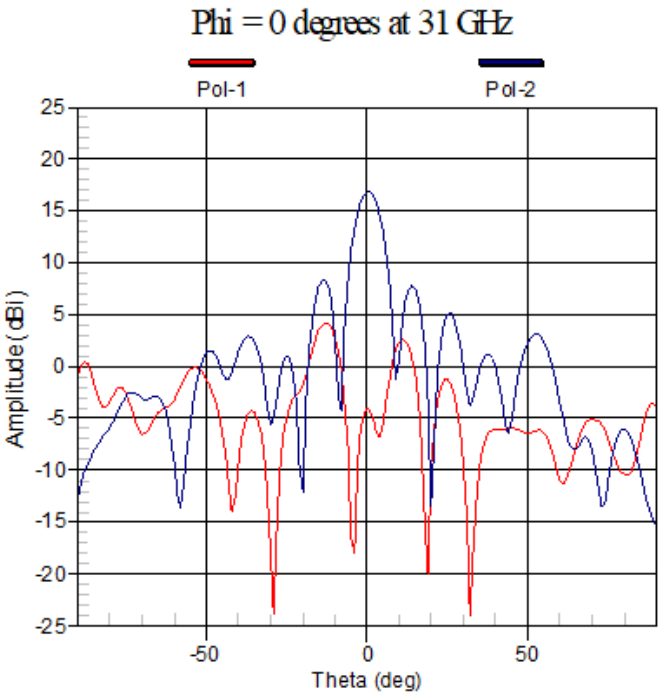


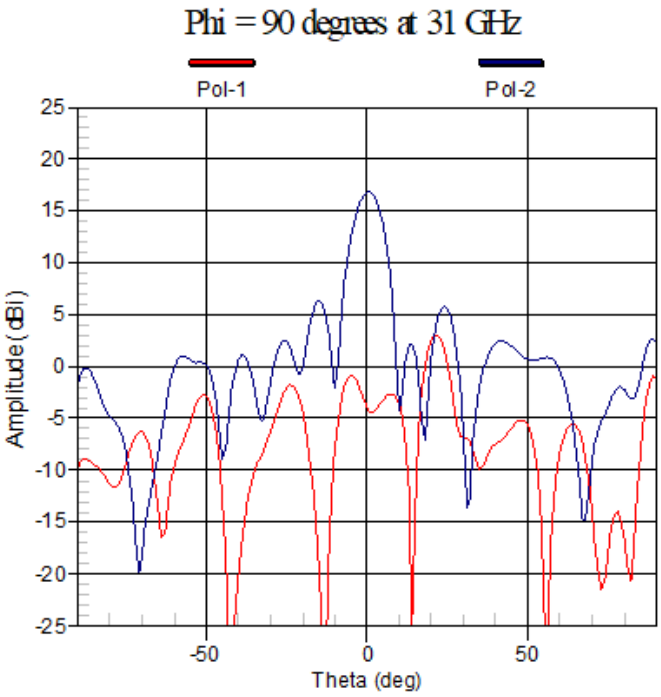
Information furnished by ReliaSat is believed to be accurate. No responsibility is assumed by ReliaSat for its use, nor for any infringements on the rights of other parties that may result for the use of the information herein. All specifications are subject to change without notice.

Flat Panel Array Antenna

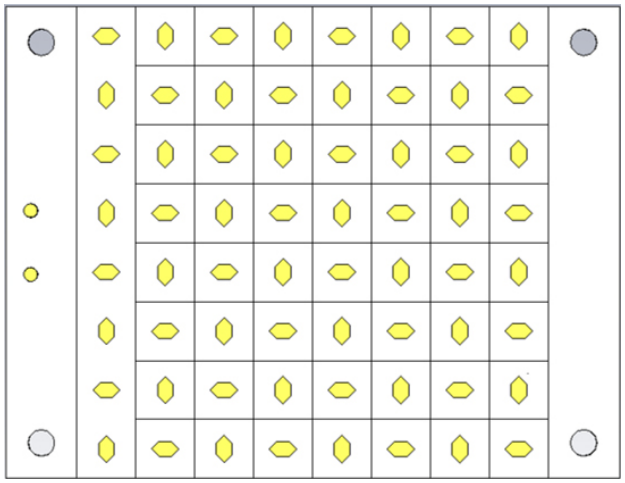
27-31 GHz

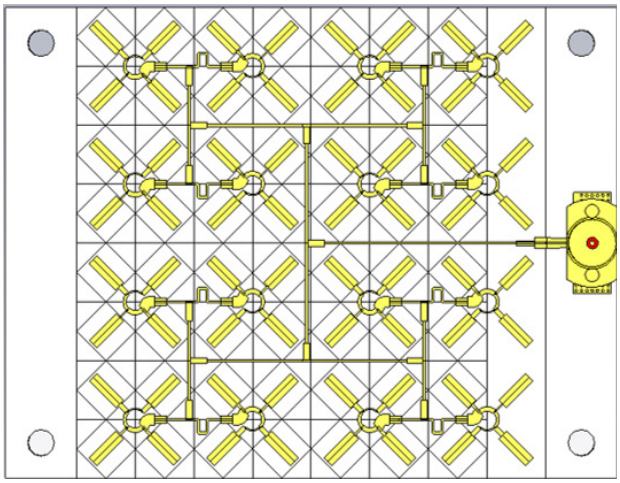
Product Datasheet





Board Layout





Contact Information

e: sales@reliasat.com

www.reliasat.com

Information furnished by ReliaSat is believed to be accurate. No responsibility is assumed by ReliaSat for its use, nor for any infringements on the rights of other parties that may result for the use of the information herein. All specifications are subject to change without notice.