



# SIGNAL ANTENNA SYSTEMS

## MODEL: FPKU-141020 & FPKU151020

*Product Data Sheet*

The **FPKU-141020-XX** and **FPKU-151020-XX** Ku-Band Antennas are compact, high-efficiency antennas engineered for aerospace and defense communications. The **FPKU-141020-XX** is optimized specifically for Ku-Band SATCOM transmit (TX) frequency coverage, while the **FPKU-151020-XX** supports Ku-Band data link applications including Common Data Link (CDL) and Tactical Common Data Link (TCDL) systems. These low-profile, circularly polarized antennas provide controlled beamwidth, stable radiation performance, low VSWR, and consistent gain across the specified operating band. Designed for airborne, ground, and mobile platforms where size, weight, and integration simplicity are critical, the FPKU series delivers reliable RF performance in a mechanically compact, integration-ready configuration suitable for UAVs, ISR platforms, pods, and tactical communication systems.

<b>PERFORMANCE CHARACTERISTICS</b>		
<b>RF and Electrical</b>	<b>PN: FPKU-141020-XX</b>	<b>PN: FPKU-151020-XX</b>
Frequency Range	13.50 – 14.75 GHz	14.40 – 15.40 GHz
Gain	20 dBi (typ)	20 dBi (typ)
Polarization	RHCP (PN:FPKU-141020-RH) or LHCP (PN:FPKU-141020-LH)	RHCP (PN:FPKU-151020-RH) or LHCP (PN:FPKU-151020-LH)
3-dB Beamwidth	16° nom	16° nom
Sidelobes	12 dB	12 dB
Axial Ratio	< 2.0 dB (13.5 – 14.75 GHz) < 1.3 dB (13.75 – 14.50 GHz)	< 1.5 dB
VSWR	2.0:1	2.0:1
Power Handling	50 Watts CW	50 Watts CW
<b>MECHANICAL</b>		
Dimensions	3.6"x3.6"x1.0"	
Weight	0.5 lbs	
Mounting	4x 6-32 Screws	
Interface	WR-62 Cover Flange or SME Female	
<b>ENVIRONMENTAL</b>		
Operating Temperature	-30° to 65°	
Humidity	100% Non-Cond.	
Wind Survival	80 mph	
<b>NOTES</b>		

