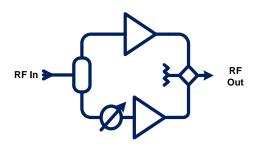


## SUPER HIGH POWER INTELLIGENT PHASE COMBINED SYSTEM IPCTM SERIES 600W / 700W / 800W C-BAND GAN SSPA/ BUC



Smaller, Lighter and more Powerful IPC™ Series Intelligent Phase Combined System allows significant high combing efficiency utilizing IRT Technologies World's Smallest and Lightest SSPAs / BUCs. The Phase Combined System provides high reliability, soft failure mode and shorter MTTR this is why IRT offers 3 years warranty for this system!

The IRT Technologies IPC™ series 600W / 700W / 800W C-Band GaN powered SSPA / BUC are very compact, light and extremely powerful. Super compact system at only 26"x32.5"x9.25", this C-band 600W / 700W / 800W IPC™ product family is the most powerful and feature rich for its size: up to 800W at saturated power. IRT IPC® features best in class RF characteristics, RF sample port, true RMS power measurements, extensive monitor and control capabilities enabled via Ethernet, Serial and/or Analog Interfaces. IPC™ remarkably compact size and high thermal efficiency results in overall system size and cost reduction making it the ideal candidate for mobile and fixed VSAT applications.

## **KEY FEATURES**

- Supercompact up to 800W Psat in 26"x32.5"x9.25" only!
- Available in both SSPA and BUC versions
- Superior RF performance:
  - ✓ High Linearity
  - ✓ PSAT up to 59 dBm
  - ✓ Wide dynamic range of Gain Control
- High Combining efficiency over full frequency band
- RF Overdrive Protection
- Different Frequency Options Available

- Field replaceable power supply
- Input and Output True RMS Power Detection
- Configuration via RS-232 Serial Console, Packet Protocol RS-485 - User Friendly HTTP Based GUI and SNMP Support
- Automated Level Control (ALC) Option
- Internal 10MHz Reference Option (BUC version)
- Status LED
- Phase Mismatch Alarm
- Power Distribution Box for Ease of Installation

800 Boulevard Saint-Jose La Prairie, QC Canada J5R 6W9 +1-450-444-1227 www.irttechnologies.com Canada (Headquarters) sales@irttechnologies.com

USA

usa\_sales@irttechnologies.com

Europe

europe\_sales@irttechnologies.com

Asia Pacific

asia\_sales@irttechnologies.com





## IPC™ Series 600W / 700W / 800W C-Band Phase Combined SSPA/BUC System Specification

Parameter	600W	800W	
RF Performance			
RF Frequency Range-Available in/switched:	5.85-6.425GHz (other fre	5.85-6.425GHz (other frequency options available)	
Saturated Power	58dBm typ	59dBm typ	
Linear power	55dBm min	56dBm min	
Gain	SSPA- 68dB min, 70dB typ;	BUC-75dB min, 77dB typ	
Gain Flatness	+/-1dB typ +/-1.5dB max over full band; +/-0.5dB max over any 40MHz		
Gain Stability over temperature	+/-1.5dB over full temperature range		
Gain Stability over input power	3dB typ 4dB max from 10dB back off to rated power		
Gain Control	20dB min dynamic range		
Linearity: 2 tone IMD Spectral Re-growth		-24dBc at P linear -30dBc for QPSK at 1.5xsymbol rate at Plinear	
Output Spurious: Non-signal related Signal related	SSPA -65dBc max; SSPA -60dBc max;	BUC -60dBc max BUC -55dBc max	
BUC Version Only:			
External Reference Frequency	10MHz multiplexed with IF In		
External Reference Required Phase Noise	-130dBc/Hz @ 100Hz -140dBc/Hz @ 1kHz	-150dBc/Hz @ 10kHz -155dBc/Hz @ 100 kHz	
Up-Converter Phase Noise	-68dBc/Hz @ 100Hz; -80dBc/Hz @ 1kHz; -90dBc/Hz @ 10kHz -95dBc/Hz @ 100kHz -115dBc/Hz @ 1MHz		
Power			
AC Voltage Range	190-265VAC 50-60Hz auto-ranging PFC		
Power Consumption at rated power	2800W	3200W	
Power Consumption at 3 dB back off	2300W	2750W	
Mechanical			
Size	26 "x32.5"x9.25"		
Weight	105lbs		
Cooling	Forced Air		
Operating temperature	-40°C to +55°C		
Relative Humidity	Up to 100% condensing		
Interfaces			
IF Input Connector	N-type female		
RF Output Connector	CPR137 grooved		
RF Sample	N-type female		
AC Power In	MS3112E12-3P		
M&C Interface-Serial, Analog and Ethernet	MS3112E14-19S;		
Redundant Interface	MS3112E14-19P		
Part Numbering Information	IRT Part N	lumber	
IRT Part Number*	600W	800W	
SSPA Version	TPA-CB00580-HPC0	TPA-CB00590-HPC0	
BUC Version	TPB-CB00580-HPC0	TPB-CB00590-HPC0	

<sup>\*</sup>Contact us for detailed ordering information at <a href="mailto:sales@irttechnologies.com">sales@irttechnologies.com</a>

Rev.02

800 Boulevard Saint-Jose La Prairie, QC Canada J5R 6W9 +1-450-444-1227 www.irttechnologies.com

Canada (Headquarters) sales@irttechnologies.com

usa\_sales@irttechnologies.com

europe\_sales@irttechnologies.com

Asia Pacific

asia\_sales@irttechnologies.com



 $<sup>\</sup>ensuremath{^{**}\mathsf{Specifications}}$  are subject to change without prior notice