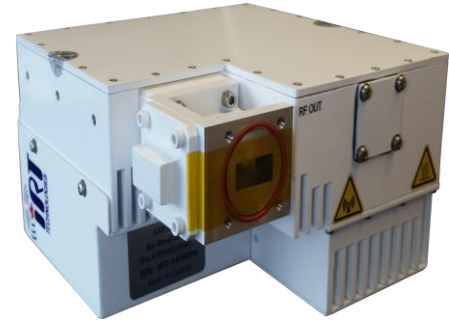


PicoBUC®

SUPER COMPACT 40W / 50W / 60W KU-BAND BUC / SSPA GAN



The IRT Technologies 40W-60W BUC / SSPB / SSPA powered by GaN technology PicoBUC® series are revolutionary in size, weight and power density- PicoBUC® offers superior performance in an extremely compact package that can fit in your palm! Weighing at only 8.8lbs, our feature-rich GaN PicoBUC® is exceptionally powerful for its size: up to 60W Psat. Built in AC power supply provides the customer with the simplest and least expensive plug-into-the wall solution. IRT GaN PicoBUC® features best in class RF characteristics, embedded WG circulator, extensive monitor and control capabilities enabled via Ethernet, Serial and/or Analog Interfaces. PicoBUC®'s remarkably small size and low power consumption results in better heat extraction that leads to overall system size and cost reduction making it the ideal candidate for portable, mobile and VSAT on the move applications. Its small size and weight allows direct feed horn mounting, which makes it a most economical solution for fixed VSAT applications

KEY FEATURES

- Up to 60W Psat Output Power in this super-compact light weight package 6.5" x 7.6" x 4.2" only!
- Only 290W Power consumption at 60W output
- 200W power consumption at 3dB back of
- Superior RF performance:
 - ✓ Phase noise 6dB better than IESS308/309
 - ✓ High Linearity
 - ✓ Spurious below -60dBc
 - ✓ Wide dynamic range of Gain Control
- Switchable LO option - standard and Extended Ku-Band in one unit
- RF overdrive protection
- Internal / Autosense 10 MHz Reference Options
- Output power measurement - True RMS detector optional
- Built In Waveguide Output Circulator provides full output VSWR Protection
- Configuration via RS-232 serial console, packet protocol RS-485 and User friendly Ethernet HTTP based GUI and SNMP support
- 48VDC isolated power supply
- Built in auto-ranging AC power supply optional
- Redundant ready with no external controller
- Field upgradable software
- Status LED
- Antenna Mounting kit optional

5580 Boulevard Thimens
Saint Laurent, QC
Canada H4R 2K9

Authorized Distributor: Servsat Communications, Inc.
sales@iservsat.com



Parameter	40W	50W	60W
RF Performance			
RF Frequency Range-Available in/switched:	14-14.5GHz 13.75-14.5GHz		
IF Frequency Range	950-1450MHz 950-1700MHz		
LO Frequency (Switchable)	13.05GHz 12.8GHz		
Conversion	Single Conversion; Non-Inverting		
Saturated Power	46dBm typ.	47dBm typ.	48dBm typ.
Linear Power	43dBm min.	44dBm min.	45dBm min.
Conversion Gain	72dB min, 75dB typ		
Gain Flatness	+/-1dB typ +/-1.5dB max over full band; +/-0.5dB max over any 40MHz		
Gain Stability	+/-1.5dB over full temperature range		
Gain Control	20dB min dynamic range		
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	70dBc/Hz @ 100Hz; -80dBc/Hz @ 1kHz; -90dBc/Hz @ 10kHz -95dBc/Hz @ 100kHz -115dBc/Hz @ 1MHz		
Linearity: 2 tone IMD	-25dBc at 3dB total power back off from rated power -30dBc at 6dB total power back off from rated power -30dBc for QPSK at 1.5xsymbol rate at 3dB back off from rated power		
Spectral Re-growth			
Noise Power Density: Transmit Band	-85dBm/Hz max		
Receive Band	-140dBm/Hz max		
Output Spurious: Non-signal related	-60dBc		
Signal related	-55dBc		
Power			
48VDC Voltage Range / 28VDC Voltage Range (optional)	36-72VDC Isolated / 24-75VDC Isolated (optional)		
AC Voltage Range (optional)	90-265VAC 50-60Hz Auto-Ranging		
Power Consumption DC power In (@ Psat / @ Plin)	225W typ. / 160W typ.	280W typ. / 220W typ.	290W typ. / 230W typ.
AC power In (@ Psat / @ Plin)	250W typ. / 180W typ.	260W typ. / 200W typ.	270W typ. / 210W typ.
Mechanical			
Size	6.5" x 7.6" x 4.2"		
Weight	8.8lbs		
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	WR75 grooved		
AC Power In	MS3112E10-8P		
RS485-RS232-Ethernet-SNMP	MS3112E14-19S		
Part Numbering Information			
Power Supply Option	40W	50W	60W
DC Isolated	TPB-KXB0460-HMS1	TPB-KXB0470-HMS1	TPB-KXB0480-HMS1
AC Auto-ranging	TPB-KXB0460-HMS0	TPB-KXB0470-HMS0	TPB-KXB0480-HMS0

*Specifications are subject to change without prior notice

Rev.07

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