

# IRK<sup>®</sup> SERIES INTELLIGENT REDUNDANT KIT

## 20W-400W C-BAND AND 16W-400W KU-BAND BUC/SSPA

### 1:1 REDUNDANT SYSTEM

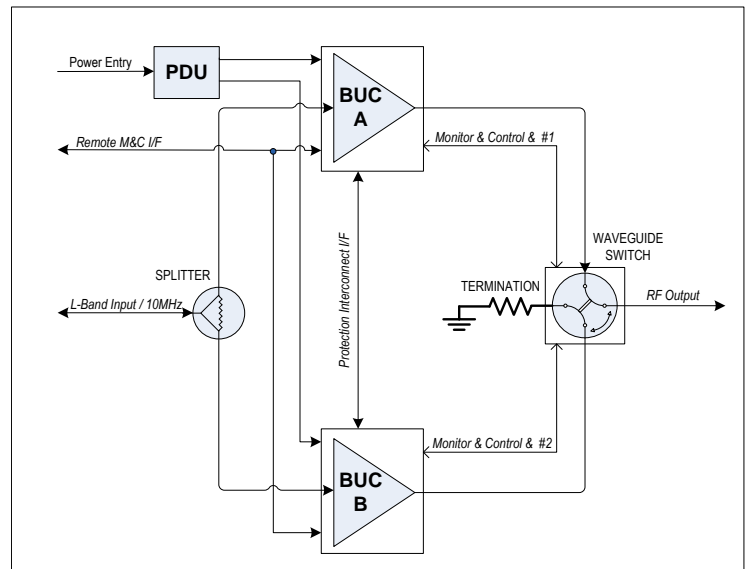
## OVERVIEW

The IRT Technologies IRK<sup>®</sup> Series (Intelligent Redundant Kit) 16W-400W Ku-Band and 20W-400W C-Band 1:1 redundancy system is light weight and super-compact due to revolutionary small size IRT BUCs / SSPAs equipped with intelligent built in redundancy controller and due to this IRK<sup>®</sup> Series redundancy systems does not require an external redundancy controller; means there is no single point failure in the redundant system and its reliability is much higher. IRK<sup>®</sup> Series features extensive monitor & control via serial ports EIA232/EIA485 and Ethernet. The state of the art web browser provides the operator with comprehensive system management tool. Power Distribution Unit (PDU) makes power connection extremely simple and convenient for the user - only one power entry cable for the system. IRK<sup>®</sup> series enable unprecedented system performance, simplicity and reliability.



## KEY FEATURES

- Eliminates External Redundancy Controller as a Single Point of Failure For the System
- Input Splitter provides 10MHz Reference to both BUCs Simultaneously - Real Hot Standby Mode for the case of External Reference
- Easy BUC/PA unit's replacement without interruption of traffic
- Remote Control over RS-232, RS-485 and Ethernet.
- Built-in SNMP and Web Server
- Auto manual, Remote, Manual Override Operational Modes
- BUC A/B Gain Equalization Feature
- Manual Switch-Over Button
- Power Distribution Junction Box
- Indoor 1RU Remote Control Unit Optional
- Internal / Autosense 10MHz Reference Optional



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## IRK® SERIES C-BAND AND KU-BAND BUC/SSPA 1:1 REDUNDANT SYSTEM

IF/RF CHARACTERISTICS	
IF Frequency Range:	950-1525MHz / 950-1700MHz
RF Frequency	5085-6.425GHz / 13.75-14.5GHz
Return Loss at IF In Port	-14dB max
Return Loss at RF Out Port	-16dB max
Output Power	Up to 400W at PsAT
Input IF port Impedance	50 Ohm
<b>EXTERNAL REFERENCE</b>	
Frequency	10MHz
Int./Ext. Autosense	Int. clock locks on external reference
Interface	Multiplexed with IF
Phase Noise @ 10Hz	-150dBc/Hz
@ 100Hz	-130dBc/Hz
@ 1kHz	-140dBc/Hz
Power Level	0dBm +/-5dBm
<b>POWER</b>	
AC Option	90-265VAC 50-60Hz to each BUC/SSPA
DC Option (16-100W only)	36-55 VDC Isolated to each BUC/SSPA
<b>INTERFACES</b>	
IF IN (L-Band and 10MHz )	N-type female
RF Out	CPR137/WR75 Grooved
User Interface	MS3112E14-19S

MONITOR & CONTROL FEATURES	
<b>Controls:</b>	
Remote/Local	Via Serial, Ethernet
Online/Stand By Toggle	Via Serial, Ethernet
Auto/Manual Toggle	Via Serial, Ethernet
Mute Control	Via Serial, Ethernet
Gain Control	Via Serial, Ethernet
Clear Alarm	Via Serial, Ethernet
LO Select	Via Serial, Ethernet
Manual Switch-Over	Nob on redundancy switch
<b>Indicators:</b>	
Remote/Local Indication	Via Serial, Ethernet
Active/Stand by status	Via Serial, Ethernet
Mute Status	Via Serial, Ethernet
Switch Position	Via Serial, Ethernet, LED
Gain Status	Via Serial, Ethernet
Temperature BUC 1-2	Via Serial, Ethernet
Lock status BUC1-2	Via Serial, Ethernet
Summary Alarm status 1-2	Via Serial, Ethernet
Output Power Detection	Via Serial, Ethernet

IRT Part Number	Power Level, Watt	Size	Weight
<b>C-BAND</b>			
IRK-CB00500- HMXX*	20W to 100W	21.5" x 18.5" x 7.6"	20lbs/9kg
IRK-CB00530- HMXX*	150W to 200W	26" x 25" x 6.25"	48lbs/22kg
IRK-CB00560- HMXX*	250W to 400W	32.5" x 26" x 9.25"	105lbs/48kg
<b>KU-BAND</b>			
IRK-KXB0470-HMXX*	16W to 50W	22.5" x 15.75" x 7.1"	18lbs/8kg
IRK-KXB0500- HMXX*	60W to 100W	25" x 18" x 6.2"	38lbs/17kg
TPA-KXB0530- HMXX*	150W to 200W	29" x 22" x 7.8"	67lbs/30.5kg
TPA-KXB0550- HMXX*	250W to 400W	38.5" x 26" x 12"	125lbs/57kg

\*Contact IRT for exact part number per configuration

\*\*Specifications are subject to change without prior notice

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