



IRK® Series

1:1 & 1:2 Up-link  
Outdoor C and Ku-Band  
SSPA/BUC Redundant System

## Overview

The IRT Technologies IRK® (Intelligent Redundant Kit) Series 10W-500W Ku / C / X / Ka-Bands 1:1 and 1:2 redundancy system is light weight and super-compact due to revolutionary small size IRT BUCs / SSPAs equipped with intelligent built-in redundancy controller; that's why IRK® system does not require an external redundancy controller for regular 1:1 configuration; means there is no single point failure in the redundant system and its reliability is much higher. IRK® Series also offers special redundancy configurations with additional switches for Air/Load switching and for Vertical/Horizontal polarizations switching. Special Face-to-face mechanical configuration makes it ideal for SNG application. 1:2 Redundancy system has an option of universal mechanical solution – any IRT BUC can be used in such system, which makes easy any system upgrade or replacement.

IRK® 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.



## Key Features

- Eliminates External Redundancy Controller as a Single Point of Failure for the regular 1:1 system
- Easy BUC/PA unit's replacement without interruption of traffic
- Remote Control over RS-232, RS-485 and Ethernet.
- Built-in SNMPv3 and Web Server
- Auto, Remote, Manual Override Operational Modes
- Manual Switch-Over Button
- BUC A/B Gain Equalization Feature
- Universal 1:2 redundancy configuration fits any IRT BUC.

- Special super-compact mechanical solution for mobile applications

## Options & Accessories

- Power Distribution Junction Box
- Indoor 1RU Remote Control Panel  
Optional
- Additional Air/Load Switch  
Optional
- Horizontal/Vertical polarization switching  
Optional
- Mechanical customization for compact mobile antennas

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CONNECTING THE WORLD TOGETHER

**IRK® SERIES KU / C / X AND KA-BANDS BUC/SSPA 1:1 REDUNDANT SYSTEM**

**RF Parameters**

RF Frequency Band, GHz	5.85-6.425GHz / 13.75-14.5GHz
IF Frequency Range, MHz	950-1525MHz / 950-1700MHz
Return Loss at IF In Port	-14dB maximum
Return Loss at RF Out Port	-16dB maximum
Output Power	Up to 1000W at PSAT
Input IF port Impedance	50 Ohm

**Power**

AC Option	90-265VAC(up to 200W); 190-265VAC (250W+) 50-60Hz	to each BUC/SSPA
DC Option (16-100W only)	36-55 VDC Isolated to each BUC/SSPA	

**Interfaces**

IF IN (L-Band and 10MHz)	N-type female
RF Out	CPR137/WR75 Grooved
User Interface	MS3112E14-19S

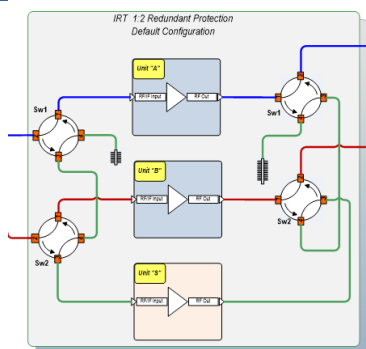
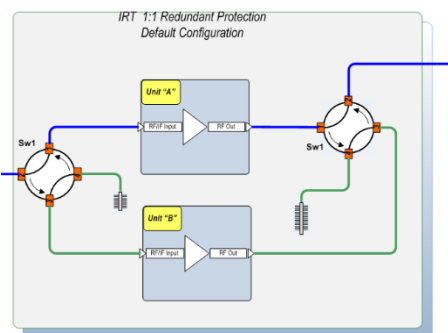
**MONITOR & CONTROL FEATURES**

**Controls:**

Online/Standby Toggle	Via Serial, Ethernet
Mute Control	Via Serial, Ethernet
Gain Control	Via Serial, Ethernet
Gain equalization offset	Via Serial, Ethernet
Hot standby/Cold Standby	Via Serial, Ethernet
Air/Load Toggle (optional)	Via Serial, Ethernet
Vertical/Horizontal Toggle (optional)	Via Serial, Ethernet

**Indicators:**

Active/Stand by status	Via Serial, Ethernet
Mute Status	Via Serial, Ethernet
Switch Position	Via Serial, Ethernet, LED
BUC A/B full telemetry	Via Serial, Ethernet
Event Log	Via Serial, Ethernet
Alarm A/B details	Via Serial, Ethernet



Specifications are subject to change without notice