



**Block Up Converter
Ka-Band (29.5-30.0 GHz)
N female, WR28
70dB Gain, 20 Watts
1+1 Redundancy Unit**



Order Examples: RBUC-L-Ka-Nf-WR28-70d-ER10M-20W-1+1-m20

Description: (Block Up Converter Band, L(950-1450 MHz) to Ka(29.5-30 GHz), N-Type Female Connector, WR28, 70dB Gain, 10 MHz External Reference, 20 Watts power, 1+1 Redundancy Unit)

Main Features

- Fully automatic 1:1 redundancy system for outdoor
- Automatically detect primary BUC faults and switch to alternate BUC via waveguide switch and IF switch
- Mainly composed of two 20W BUCs, a System Controller, a Switch Controller including an IF switch, a Waveguide switch
- Optional AC Power Supplies, Related cables, and Mounting Brackets are available
- A separate system controller with Auto/Manual mode switching, BUC gain control, SSPA On/Off buttons, and Status LEDs and Gain LCDs
- Graphic User Interface (GUI) based M&C through Ethernet
- Easy installation and maintenance
- Easy replacement of Failed BUC while the system is operating

Specifications

- WR28 waveguide switch loss: 0.15dB max
- Interfaces RF output: WR28 waveguide (groove)
IF Input: N-type (Female)
M&C: RJ45
DC power: MS3112E 14-5P (+48V)
AC power (optional): MS3102A-14S-1P
- Dimension Overall system: 440 x 400 x 188 mm
20W BUC: 280 x 160 x 110 mm
Switch controller: 255 x 130 x 40 mm
System controller: 420 x 350 x 88 mm
- Environmental
Operating temperature: -40 ~ +55 °C
Relative Humidity: up to 95%
Built for IP67
- Power requirements
+48V±10% through MS connector
250W power consumption
400W AC/DC power supply available (Optional)

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Specifications may be subject to change

11/27/17

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.

Tel: (408) 266-7404

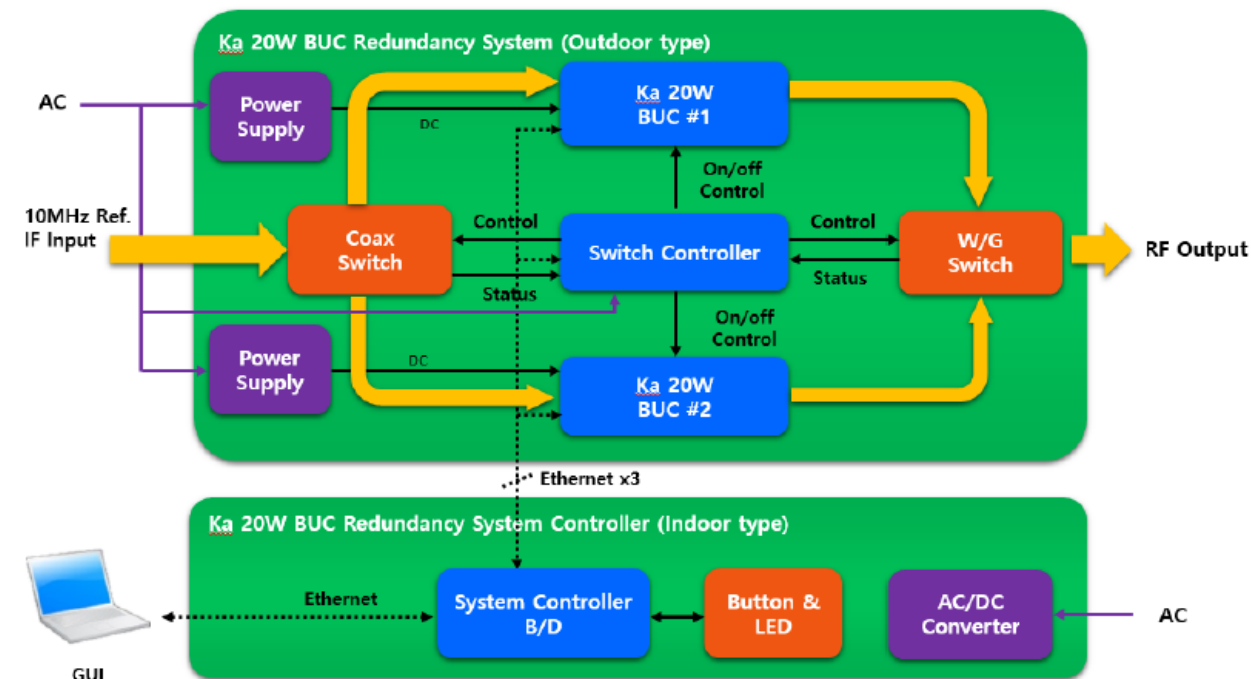
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WEB: www.raditek.com

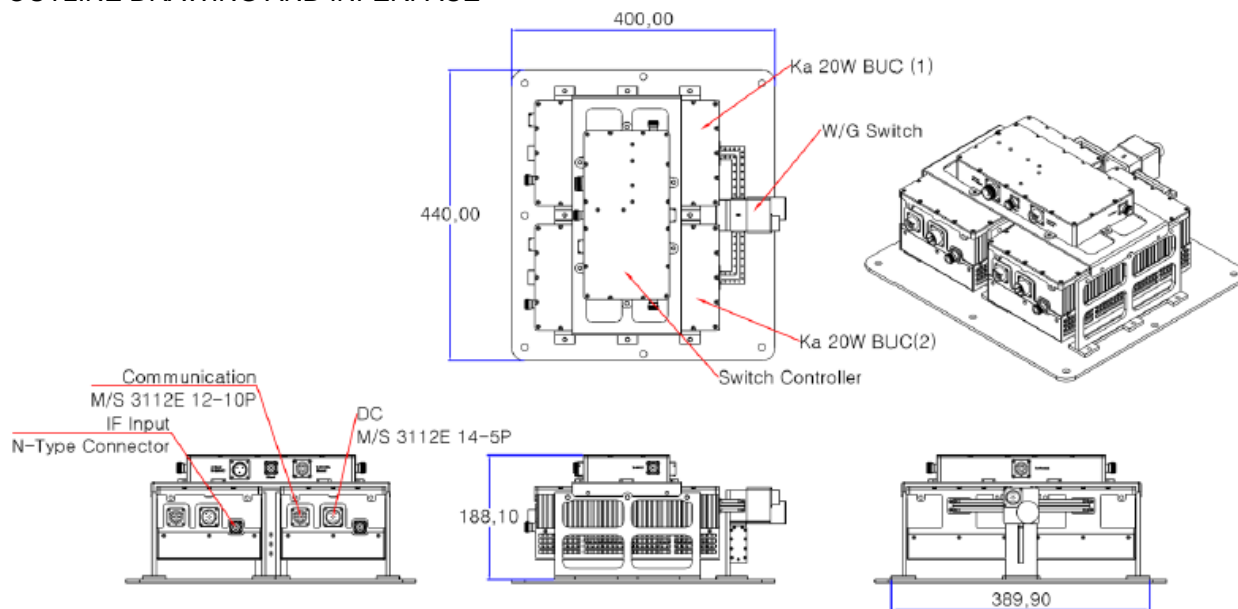
E-mail: sales@raditek.com

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REDUNDANCY UNIT CONFIGURATION



OUTLINE DRAWING AND INTERFACE



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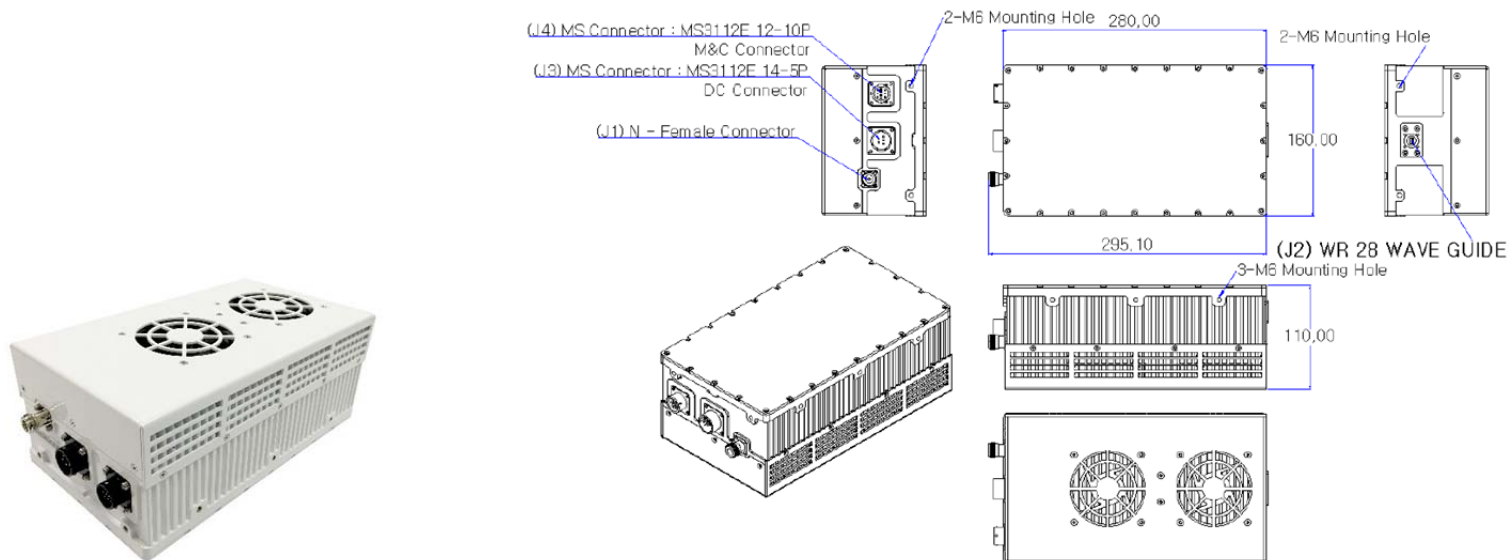
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Specifications		Units
Input Band Frequency	950-1450	MHz
Out Frequency	29.5-30.0	GHz
LO Frequency	28.55	GHz
Frequency sense	No Inversion	
Saturate output power	+43	dBm (nominal)
Maximum linear output power	+40 @25°C with derating at high temperature	dBm min
Input return loss	12	dB min
Output return loss	12	dB min
Phase noise(SSB)	-60 @100Hz -73 @1KHz -83 @10KHz -93 @100KHz	dBc/Hz max
External reference signal frequency	10	MHz
External reference level	-5 to +5	dBm
External reference phase noise	-145 @1KHz	dBc/Hz max
Spectral regrowth	25 @linear power	dBc min
Group delay variation	±5.0 nanoseconds over any 45MHz	
Spurious (In/Out-band)	-50 @ Linear power	dBc max
Gain	70	dB max
Gain control	Δ15dB, 1dB step	
Gain stability over temp	±2.0dB at any const. frequency	
Gain flatness	±1.0dB in any 45MHz ±2.5dB over full band	
Power requirement	+36 to +72 supplied through MS connector	VDC
Power consumption	250	Watt max
Input Interface	N-female	
Output Interface	WR28 waveguide	
Dimension	280(L) x 160(W) x 110(H) mm	mm
Weight	5.5	kg
Operating temperature	-40 to 55	°C
Humidity	0-95%	

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Specifications		
DC connector	MS3112E14-5P	
M&C interface	MS3112E12-10P	
M&C Function	- Output power - Temperature - LO status - Output power mute	- Gain control - EXT mute - Fan status - Firmware upgradable

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