

RADITEK

SATCOM BUC-Ka Band

Block Up Converter Ka-band N Female, WR 28, 65dB Gain, 5 Watts



Order Examples: RBUC-L-Ka-Nf-WR28-65d-ER10M-5W-E-m20

Description: (Block Up Converter, L(950-1450MHz) to Ka (29.5-30GHz), N-Type Female Connector, WR28, 65dB Gain, 10MHz External Reference, 5 Watts power, **Option E** DC via MS connector, gain adjustable, M&C)

Additional Options: **Option (1.0-2.0GHz)** **(29-30GHz, 30-31GHz)** **F Female 75Ω**

Specifications				Units
Input Band Frequency	950-1450MHz	1000-2000	1000-2000	MHz
Out Frequency	29.5-30	29-30	30-31	GHz
LO Frequency	28.55GHz	28.0GHz	29.0GHz	GHz
Frequency sense	No Inversion			
Saturate output power	37dBm min @-40 to 25 °C 36dBm min @up to 55 °C			dBm
Maximum linear output power	35			dBm min
Input return loss	10dB min			dB
Output return loss	10dB min			dB
Phase noise(SSB)	-60dBc max @100Hz -73dBc max @1KHz -83dBc max @10KHz -93dBc max @100KHz			dBc/Hz
External reference signal frequency	10			MHz
External reference level	-5 to +5			dBm
External reference phase noise	-145dBc/Hz max @1KHz			dBc/Hz
Spectral regrowth	25 @linear power			dBc min
Group delay variation	±5.0 nanoseconds over any 45MHz			nS
Spurious (In/Out-band)	-50 @ Linear power			dBc max
Gain	65dB max			dB max
Gain control	Δ15dB, 1dB step)			dB
Gain stability over temp	±2.5dB at any const. frequency			dB
Gain flatness	±1.0dB in any 45MHz ±2.5dB over full band			dB
Power requirement	+36 to +72 supplied through IFL or MS connector			VDC
Power consumption	88			Watt max
Input Interface	N-female, F-female			
Output Interface	WR28 waveguide			

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Specifications may be subject to change

11/28/17

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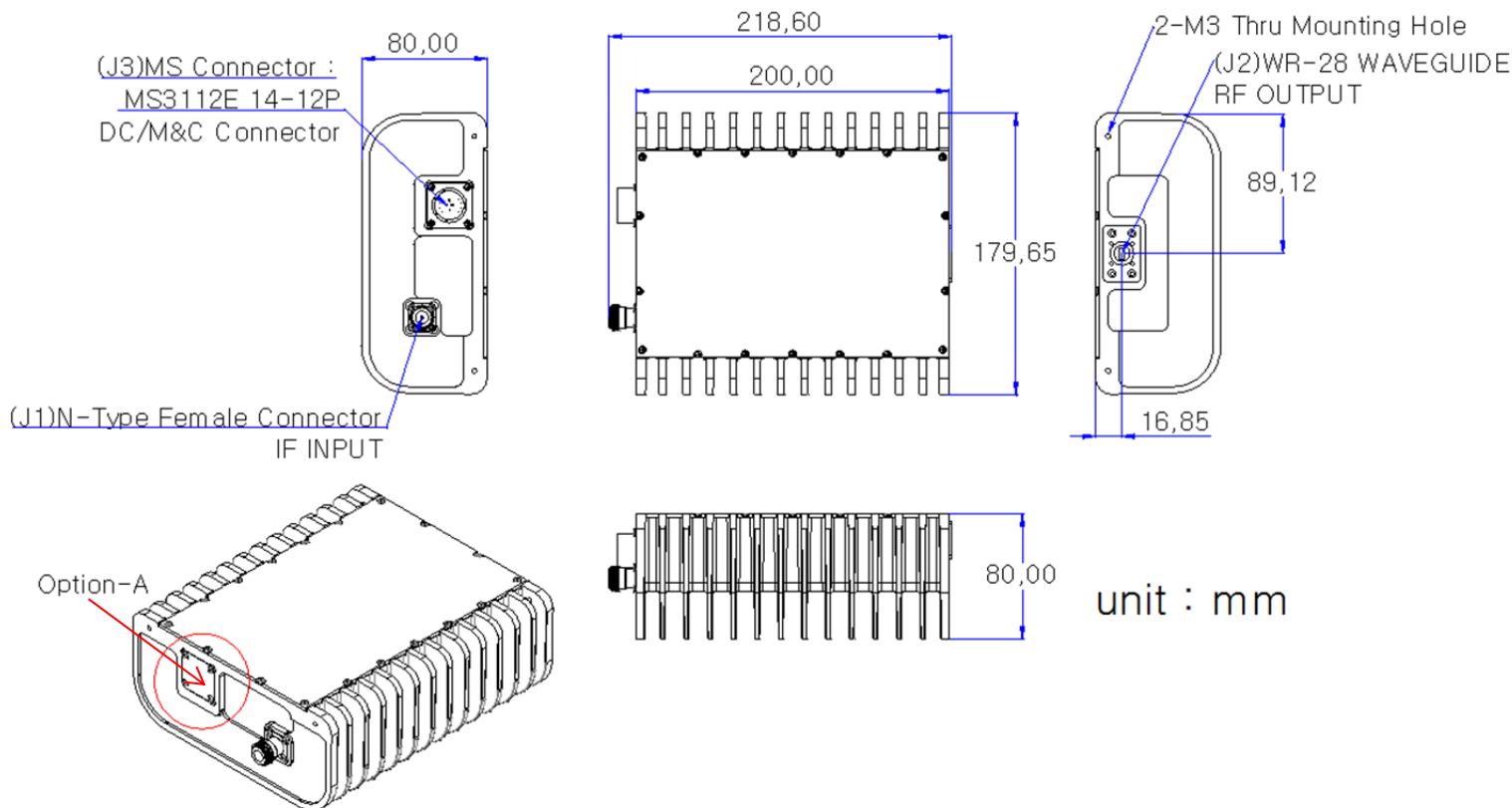
WEB: www.raditek.com

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Block Up Converter L to Ka Band N female, WR-28, 65dB Gain, 5 Watts

Specifications		Units
Dimension	200.(L) x 180(W) x 80(H) mm	mm
Weight	3.0	kg
Operating temperature	-40 to 55	°C
Humidity	0-95%	
DC, M&C interface	Ethernet or RS232 through MS3112E14 12P connector - Output power (optional) - Temperature - LO status - Output power mute - Gain control - EXT mute - Band switching	



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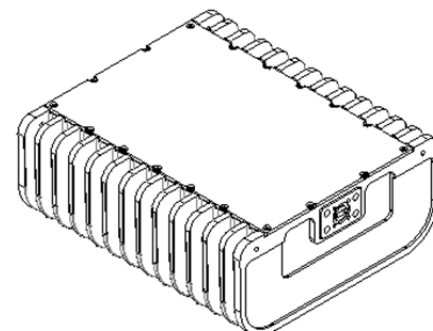
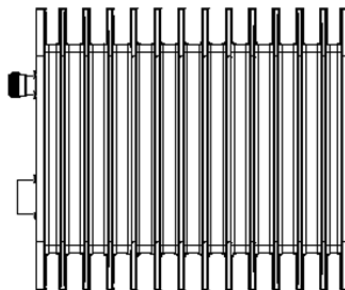
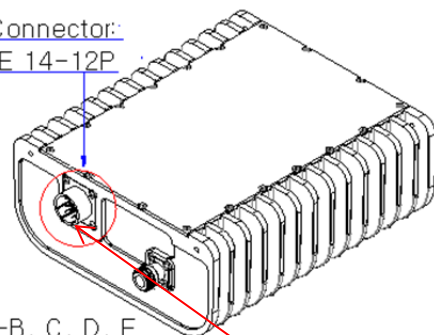
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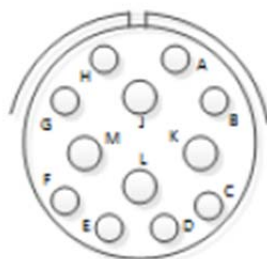
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(J3)MS Connector:
MS3112E 14-12P

Option-B, C, D, E



J3



MC Option

A	DC via IFL, fixed gain, no M&C as picture page 2
B	DC via IFL, fixed gain, M&C
C	DC via IFL, gain adjustable ($\Delta 15\text{dB}$, 1dB step), M&C
D	DC via MS connector, fixed gain, M&C
E	DC via MS connector, gain adjustable ($\Delta 15\text{dB}$, 1dB step), M&C

Connector	Parameter	Description
J1	IF input connector	N-female, panel-mounted
	Impedance	50 ohm
	10MHz reference input	
	DC	+36-+72VDC
J2	RF output connector	WR28 waveguide flange
J3	M&C(Ethernet or RS232)	Panel-mount (MS3112E14-12P)
	J3-A	Ethernet Tx+
	J3-B	Ethernet Tx-
	J3-C	Ethernet Rx+
	J3-D	Ethernet Rx-
	J3-E	
	J3-F	RS-232 GND
	J3-G	RS-232 TxD
	J3-H	RS-232 RxD
	J3-J	DC Power (+36 to +72V)
	J3-K	DC Power Return
	J3-L	Mute @High
	J3-M	Mute Return (=RS-232 GND)

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