



Block Up Converter L to Ku Band
 Block Down Converter Ku to L Band
 Up to 4 converter modules in a single 1RU shelf



Kus(14-14.50) / Kue(13.75-14.50) Indoor Unit



Our Frequency Converters offer a new best in class for the Industry. Not only for ease of operation, but lowest cost too. They embody embedded redundancy options and extensive monitor and control via: front panel, serial ports (EIA232/EIA485) and Ethernet

There may be up to 4 converter modules in a single 1RU shelf, and they can be configured for various applications and bands. The reference with autosensing can lock to an external 5/10 MHz reference or utilize the built-in high stability, reference oscillator.

Hot-swappable shelf redundancy option and extensive monitor and control via front panel, serial ports EIA232/EIA485 and Ethernet

Key Features:

- Superior RF performance:
 - Phase noise >8dB better than IESS308/309
 - In-band Spurious < -60dBc
 - Superior Gain flatness
- Switchable LO option - standard and Extended Ku-Band in one unit
- User Friendly front panel with menu driven graphical display
- 5MHz or 10MHz external reference with Autosense.
- *Up to 4 frequency converters in a single 1RU chassis (1.75" H x 19" W x 19" D)
- Full featured M&C Interface via serial EIA485, EIA232, Ethernet HTTP based GUI and SNMP:
 - 20dB Gain Control
 - Input and output power detectors
 - Automated level control (ALC) mode optional
- 1:N Redundant ready
- RF and L-Band monitoring optional
- 48VDC isolated power supply optional

Order Examples: RBUC-L-KuS-Nf-AC-IDU-i13

Description: (Block Upconverter, L Band to KuS(14-14.5GHz), N Female Connector, 90 to 265VAC, Indoor Unit)

Order Examples: RBDC-KuS-L-Nf-AC-IDU-i13

Description: (Block Downconverter, KuS(14-14.5GHz) to L Band, N Female Connector, 90 to 265VAC, Indoor Unit)

Additional Options: (KuE 13.75-14.5GHz) – DC 48V – (ER5M or ER10M - 5MHz or 10MHz External Reference)

*Please specify number of 4 frequency converters and combinations at time of order.

Block Up and Down Converter family Rack Mount: Ku Band Kus(14-14.50) / Kue(13.75-14.50) Indoor Unit

L- to Ku-Band Up- Converter Rack Mount System

Parameter	Up-Converter		Down-Converter			
	Standard Ku	Extended Ku	Ku Sub-Band 1	Ku Sub-Band 2		
RF Performance						
RF Frequency Range-Available in/switched:	14-14.5GHz	13.75-14.5GHz	10.70-11.70GHz	11.70-12.75GHz		
IF Frequency Range	950-1450MHz	950-1700MHz	950-1950MHz	950-2000MHz		
LO Frequency	13.05GHz	12.8GHz	9.75GHz	10.75GHz		
Input Return Lost	16 dB		18 dB			
Output Return Lost	18 dB		16 dB			
Noise Figure	5 dB Max					
Conversion	Single Conversion; non-inverting					
Output Power at 1dB compression point	10dBm min					
Conversion Gain	35dB					
Gain Flatness	+/-1dB max over full band; +/-0.5dB max over any 40MHz					
Gain Stability	+/-1.5dB over full temperature range					
Gain Control	20dB min					
External Reference Frequency	10MHz					
External Reference Required Phase Noise	-130dBc/Hz @ 100Hz	-140dBc/Hz @ 1kHz	-150dBc/Hz @ 10kHz	-155dBc/Hz @ 100 kHz		
Spurious	Signal related *		-55dBc			
	Non signal related		-60dBc			
Monitor & Control Features						
Interfaces:						
	Serial - EIA485		DB9 Connector rear panel			
	Serial - EIA232		RJ45 or DB9 Front Panel			
	10/100 base-T Ethernet		RJ45 rear panel			
	Alarm and Control		DB9 Connector rear panel			
	Redundant protection interface		HD15 Connector rear panel			
Controls:						
	Gain Control		via Serial, Ethernet, Front panel			
	LO Select - Standard/Extended Ku Band Toggle		via Serial, Ethernet, Front panel			
	Mute Control		via Serial, Ethernet, Front panel, Red Int.			
	Local/Remote toggle		Serial(Ethernet)/Front panel toggle			
	Clear Alarm		via Serial, Ethernet, Front panel			
Indicators:						
	Lock Status		via Serial, Ethernet, Front panel			
	Gain Status		via Serial, Ethernet, Front panel			
	IF Power Detect		via Serial, Ethernet, Front panel			
	RF Power Detect		via Serial, Ethernet, Front panel			
	Temperature		via Serial, Ethernet, Front panel			
	Summary Alarm Status		via Serial, Ethernet, Front panel, Red Int			
	Mute Status		via Serial, Ethernet, Front panel, Red Int			
	Lock Status		via Serial, Ethernet, Front panel			
Power Supply						
Input Voltage	90 to 265VAC 50/60Hz PFC		Width	19" Rack	IF/RF Connectors	
	48VDC Optional		Height	1RU	IF	N-type (other options available)
Environmental						
Operating temperature	0 to 60 °C		Depth	19"	RF	N-type
Storage Temperature	-40 to +85 °C		Color	Metallic	10MHz Ref In/Out	BNC (other options available)
			Cooling	Forced air		