

# Indoor 70MHz to C-band Up Converter

## SCMUC15001BN10-RM

(Rev.01)

### Features

- ◆ Ultra low phase noise
- ◆ 1kHz step size
- ◆ 25dB gain control range in 0.1 dB step size
- ◆ Monitoring & Controlling Via RS232 Interface & Ethernet
- ◆ Carrier mute function
- ◆ Unit in standard 19" Rack Mountable 1U chassis



### RF Specifications

#### Input Characteristics

Frequency	70/140 +/-18MHz Option: 140 +/- 36MHz
Impedance	50Ω
VSWR	1.2:1 maximum
IF Input Connector	BNC-type female

#### Output Characteristics

Frequency	5850-6425MHz for Intelsat C band 6425-6725MHz for Palapa C band 6725-7025MHz for Insat C band
Impedance	50Ω
VSWR	1.3:1 maximum
Output power (P1dB)	+10 dBm Min.
Output connector	N type female

#### Channel Characteristics

Frequency Sense	Non-inverting
Conversion Gain	35 dB nominal
Gain flatness over frequency	
Over full band	±1.5 dB
Over 36 MHz	±0.3 dB



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Gain Stability over Temperature	±0.25dB maximum
Inter Modulation (Two tones at combined output power of -10dBm)	-60dBc
Noise figure	12 dB (at minimum gain attenuation)
Spurious	
In-band signal related	<-65 dBc @ 0dBm output
In-band Signal independent	<-70 dBm
Out of band	<-60 dBm
Phase Noise	
Frequency Offset	Phase noise
1 KHz	-80 dBc/Hz
10 KHz	-90 dBc/Hz
100 KHz	-100 dBc/Hz
1MHz	-110dBc/Hz

### 10MHz Reference

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Internal 10MHz reference stability	+/-10 ppb over operation temperature
Internal/External reference	Auto Selection
External Reference Level	-5 to +5 dBm
External Reference in connector	BNC female

### Monitoring and Controlling

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Interface	
Local	Front panel LCD display, Key pad control
Remote	RS232, Ethernet Optional
Gain Control	25dB range in 0.1dB step size
Power	Front panel green LED
LO Alarm	Front panel red LED
Input Monitoring	Front panel BNC female
Output Monitoring	Front panel SMA female



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### Power Supply

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Operating voltage	100~240 VAC, 47 ~ 53Hz
Power consumption	30w Typical

### Environmental Conditions

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Operating temperature	0°C to +50°C
Relative Humidity	Up to 95%

### Mechanical

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Dimensions	19" Rack Mountable 1U; Depth: 430mm Max.
Weight	4.5kg Typ.
Color	Light Grey

### Order Information

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Output frequency	Part Number
5850-6425MHz	SCMUC15001BN10-RM-01
6425-6725MHz	SCMUC15001BN10-RM-02
6725-7025MHz	SCMUC15001BN10-RM-03

