

# Indoor Ext C to L- band Down Converter SCMDC42002NN10-RM (Rev.01)

## Features

- ◆ Build-in 1+1 Redundancy Control
- ◆ Extra low phase noise
- ◆ 20dB gain control range in 0.5 dB step size
- ◆ Monitoring & Controlling Via RS232/485 Interface
- ◆ Monitoring & Controlling Via Ethernet
- ◆ Unit in standard 19" Rack Mountable 1U chassis

## RF Specifications

### Input Characteristics

Frequency	4500-4800MHz
Impedance	50Ω
VSWR	1.3:1 maximum
input connector	N type female

### Output Characteristics

Frequency	950-1700MHz
Impedance	50Ω
VSWR	1.3:1 maximum
Output power (P1dB)	+10 dBm
Output connector	N type female

### Channel Characteristics

Frequency sense	Inverting
Image rejection	60 dB minimum
Conversion gain	40 dB minimum
Gain flatness over frequency	
Over full band	±1.5 dB
Over 36 MHz	±0.5 dB
Gain stability over temperature	±1dB maximum
Inter modulation	
(Two tones at combined output power of 0dBm)	
	-50dBc maximum



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Noise figure	12 dB Max (@ max gain)
Spurious	
In-band signal related	<-60 dBc @ max gain
In-band Signal independent	<-60 dBm @ max gain

## LO Characteristics

LO Frequency	5950MHz
Phase noise	
Frequency Offset	Phase noise
100Hz	-70dBc/Hz Max
1 KHz	-80 dBc/Hz Max
10 KHz	-90 dBc/Hz Max
100 KHz	-100 dBc/Hz Max
1MHz	-105dBc/Hz Max

## 10MHz Reference

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

## Monitoring and Controlling

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Interface	
Local	Front panel LCD display, Key pad control
Remote	RS232/RS485, DB9 (Option: Ethernet, RJ45)
Gain control	20dB range in 0.5dB step size
Output control	Manual On/Off, auto off when LO is unlock
Redundancy	Auto/Manual
<b>LED Indicators on front panel</b>	
Power	Power on : Green LED
Alarm	LO unlock: Red LED

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Redundancy Auto: Green LED  
Local/ Remote Local: Green LED

### Power Supply

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Operating voltage 100~240 VAC, 47 ~ 53Hz  
Power consumption 60w Typical  
Input connector Three pin plug with EMI filter

### Environmental Conditions

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Operating temperature -10°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

