MODEL MBUC8150S43A
OUTPUT: 7.9~8.4GHz
20Watt
X-BAND BLOCK UP-CONVERTER

Advantages:

- Integrated BUC for Better Performance & Reliability
- Monitoring & Controlling
- Tricolour LED Status Indicator to Identify BUC Status Instantly

ELECTRICAL SPECIFICATIONS

Parameter		Specifications	
IF Frequency Range		950 ~1450 MHz	
Output Frequency Range		7.9~8.4 GHz	
LO Frequency		6.95 GHz	
Saturated Output Power		43 dBm (Min)	
Power Gain @ Pin=-20dBm		63 dB (Min)	
Power Gain Flatness		±1 dB (Typ)	
Small Signal Gain @Pin=-40dBm		73 dB (Typ)	
Small Signal Gain Flatness		±2 dB (Typ)	
IM3 @Pout = 36dBm (two tones, 5MHz)		-25 dBc (Max)	
Spurious		-50dBc (Typ)	
Gain control Range		20dB Variable, Step size of 0.25dB	
Phase Noise	100Hz	≤-65 dBc/Hz	
	1kHz	≤-75 dBc/Hz	
	10kHz	≤-85 dBc/Hz	
	100kHz	≤-95 dBc/Hz	
	1MHz	≤-105 dBc/Hz	
Input VSWR		1.5:1 (typ)	
Output VSWR		1.3:1 (Max)	
Input/Input Impedance		50 Ω	
External Reference Input		Frequency	10MHz
		Power	-5 to 5 dBm (Unit will automatically switch to internal reference if external reference level falls below -10 dBm nominal)
		Phase Noise	-135dBc/Hz@100Hz max. -145dBc/Hz@1kHz max. -155dBc/Hz@10kHz max.
M&C Function Interface		Ethernet (default) , optional RS485/232	
LED Function		Green: Normal, Red: Fault, Blue: PA Off	
Command Function		PA On/Off, Gain Control, Out-of-lock Alarm, Temperature, Over- VSWR Protection, Summary Alarm	

Protection and Warning Function

No	Specifications
1	Unlock protection/ Warning
2	Over-current protection/ Warning
3	Over-voltage protection/ Warning
4	Over-temperature protection/ Warning
5	Over-reflection protection/ Warning

Interface

Tag	Specifications	Connector model
IF/ REF IN	IF/ REF input	N
RF OUT	Output	WR-112G
M&C	LAN	Circle Connector
Power DC 28V	Power supply	Circle Connector

Power DC Interface Connector (4pin Circle Connector)

PIN	Specifications	Connector model
1,2	28VDC	
3,4	GND	

Operating Power Requirement

Parameter	Specifications
Operating Voltage	24~30VDC, 28VDC (Typ)
Power Consumption	110 Watts (Typ)

Environmental Conditions

Parameter	Specifications
Operating Temperature	-40°C to +60°C
Storage Temperature	-50°C to +70°C
Humidity	0 to 95%
Water proof/ Dust proof	IP65

Mechanical

Parameter	Specifications
Dimensions (L x W x H)	180 x 120 x 110(mm)
Weight	3.5kg
Paint	RAL7035(GRAY)

Absolute Maximum Ratings

Parameter	Specifications
IF input power	≤5dBm
Load VSWR @RF OUT	VSWR≤5:1(assured by design)
Thermal Degradation	85℃ @ heatsink

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