



# UP Converter KU, DBS UPC - Ext

## TECHNICAL SPECIFICATIONS

### ELECTRICAL

Input frequency range	
Low Ku / Extended Ku / DBS	950-1.450MHz / 950-1700MHz / 950-2.050MHz
Output frequency range	
Low Ku / Extended Ku / DBS	12.75-13.25GHz / 13.75-14.5GHz / 17.3-18.4GHz
P1dB	15dBm
Gain	30dB
Gain Flatness	< 1.5dB p-p, max over full band
Gain variation over temperature	± 0.5 dB over full operating range
Attenuation Adjustment Range	20dB in 0,25dB step
Input VSWR	≤1.5:1
Output VSWR	≤1.3:1
Spurious	-60dBc max @ 5dBm
Harmonics	≤ 60dBc
Phase noise	-65 dBc/Hz at 100Hz, -75 dBc/Hz at 1kHz, -85 dBc at 10kHz, -95 dBc at 100kHz

### EXTERNAL REFERENCES

Reference frequency	10MHz
Reference phase noise	-135dBc/Hz at 100Hz, -145dBc/Hz at 1kHz, -155dBc/Hz at 10kHz
Reference frequency level	0 dBm ± 3dB supplied via input L-band cable

### POWER SUPPLY

Input Voltage	VAC
Power Consumption	10W

### MECHANICAL

Dimensions (L x W x H)	380 x 320 x 65 mm
Weight	7 kg
Interfaces	
RF Input	Type N
RF Output	k(f) - 2.92
Monitor Control	MIL-C-26482-I compatible, Size 14, 19 pins female
Power supply	MS3112E12-3P

### MONITOR & CONTROL

Remote control	RS-485
Hardware control	OL, REF, MUTE, Output detection (ON/OFF), SUMALARMS
Monitor parameters	Input Power, Output Power, Temperature
Temperature monitor accuracy	± 3°C
Thermal shutdown control threshold	+ 85°C

### ENVIRONMENTAL

Operating Temperature	-30°C to +55°C
Storage Temperature	-40°C to +85°C
Humidity	100%, condensing



### Key Features

- External Up-Converter
- Outdoor Operation
- Different versions:  
Ku, DBS
- 1:1 Redundancy  
configuration option

The UPC-Ext is an independent up converter module that have different versions to operate in Ku band (Low or Extended Ku) or in DBS band. It's designed for outdoor operations, in order to be installed close to the GaN SSPA units. It provides information about input and output power levels as well as temperature of the module.

It could be installed in 1:1 redundancy configuration, with a fast switching time from main to back up in case of failure.