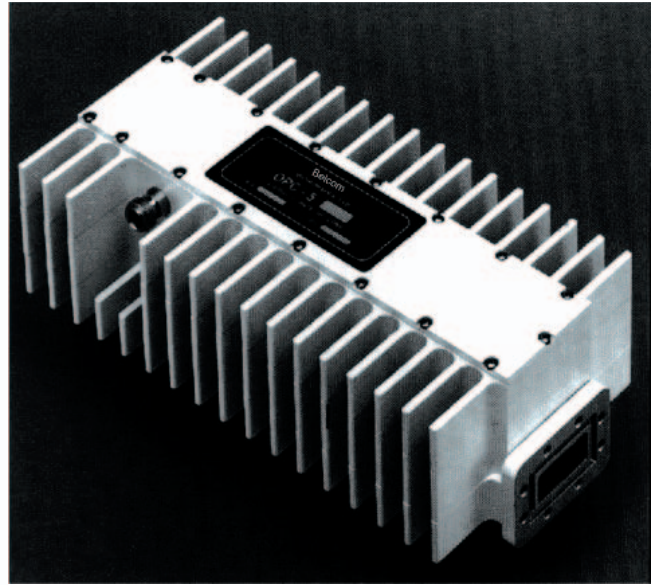


HIGH RELIABILITY SATCOM PRODUCTS

OPx - 5 Series

5 Watt

C BAND VSAT
UPCONVERTER
TRANSMITTER



FEATURES:

Output Power (at 1dB compression) 37dBm
Synthesized L.O.

Provision for locking local oscillator to an external
reference source

IF, DC & External 10 MHz reference multiplexed on
input coaxial cable
Operating Temperature -40 to + 60 Deg. C

Dimensions: 275 X 40 X 88 mm
Weather Sealed (including connector)
Field-Proven High Reliability

The C Band VSAT upconverter transmitter is a linear outdoor
unit used for the uplink of a VSAT network.

Its output power, phase locked local oscillator source, compact
size and competitive price make this unit ideal choice for VSAT
and USAT applications.

The unit is robust, rugged and is well adapted for direct mounting
on the VSAT antenna feed or OMT.

PERFORMANCE CHARACTERISTICS

Electrical

Input impedance.....50 Ω
 Input return loss.....12 dBr

	C-Band	Insat	Ext.C-Band
Input freq.	950-1525 MHz	975-1275 MHz	1075-1435 MHz
Output freq.	5.85-6.425GHz	6.725-7.025GHz	6.365-6.725 GHz

Input power (1dB comp.).....-31 dBm (typ.)
 Output power (at 1 dBcp).
 +37.5 dBm(typ.),37.0dBm(min.)
 Gain(Nominal).....62±3 dB
 Gain Flatness
 Over any 1 MHz band.....±0.2 dB max
 Over any 36 MHz band (25°C).....±0.7 dB max
 Over frequency range.....±1.7dB max
 Gain Stability (over temp. for constant input).....±2.0 dB
 Ref. signal.....External 10 MHz(std.) -3 dBm to +7 dBm
 Multiplexed on L-Band input (internal ±3 ppm opt.)
 Spectrum sense.....Inverting
 Total frequency uncertainty.....Control by Reference
 Phase noise
 At 1 KHz offset.....-75 dBc/Hz
 At 10 KHz offset.....-81 dBc/Hz
 At 100 KHz offset.....-95 dBc/Hz
 Leakage and Spurious Signals
 Up to 1 dB comp. In-Band.....-55 dBc max,-60 dBc typ.
 Harmonics.....-100 dBc max
 In RX band.....-140 dBm/4 kHz max
 Wideband noise in RX band.....-160 dBm/Hz max
 3rd Order intercept point, IP3.....P1dB + 7 dB min
 Stability: The unit will not oscillate under any condition of load, temperature or DC supply.

Protection

- Thermal runaway protection
- No failure for any combination of load reflections.
- DC supply spikes protection
- Missing 10 MHz Ref. shuts transmitter to -60 dBc min

Power supply voltage (on input coax cable)+15 to +24 V
 Maximum current.....2.5 A @ 24 V input
4.8 A @ 15 V input

Mechanical

IF + DC + reference input.....50Ω, N-type (f), std.
 TNC, F-typ opt.
 RF output.....WR-137
 (Flange CPR137G & O-ring)
 Weight.....3.8 kg
 Finish.....White polyurethane paint

Environmental

Operating Temperature.....-40°C to +60°C
 Sealing.....Moisture sealing by O-ring
 Weather-proof
 Vibration.....5-350 Hz 0.0015 g²/Hz
350-500 Hz -6 dB/oct
500 Hz 0.00074 g²/Hz
 Shock.....10 g @ 10 m s(half sine)

Ordering Information

C-Band	OPC - 5
Insat	OPIN - 5
Ext. C	OPPA - 5

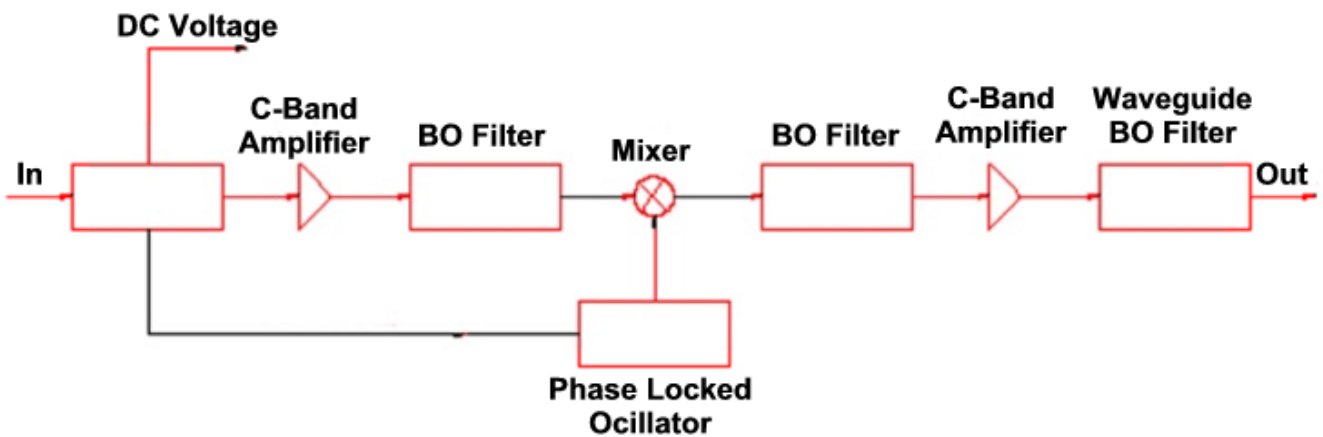


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For Block Diagram & Outline Drawing -
 Please view the next page.

Opx - 5 Series

Block Diagram



Outline Drawing (Dimensions in mm)

