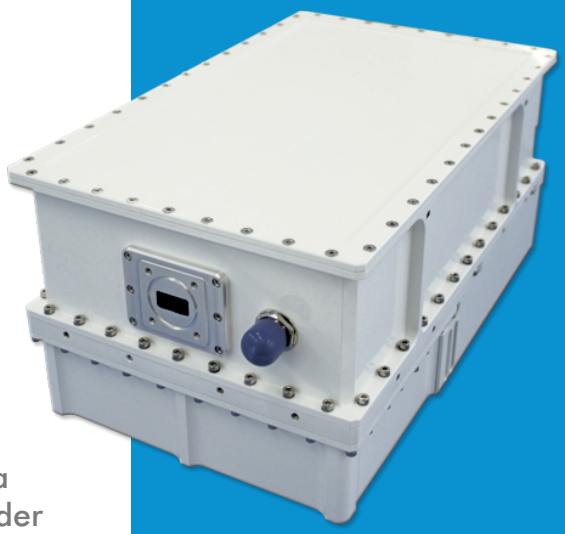
GaN C BUCs
100W / 200W / 400W

New Generation of GaN based BUCs for broadcast satellite communications



High Efficiency and Reliability

Based on GaN technology are intended for outdoor operation. Highest performance in a compact packaging. Built-in isolator and switchable local oscillator included. Signal up conversion from a Modem's L band output into C band frequency in order to perform a terrestrial or satellite communication link.

Optimized Consumption

In addition to the superior efficiency achieved at maximum load, these products provide the capability to adapt the BUC configuration to the required output power, optimizing the consumption while keeping the same electrical specifications, in particular the linearity.

Monitoring and Control

RFull M&C capability provided via RS-232/RS-485 (ASCII commands) and optionally via Ethernet port (Telnet, HTTP with embedded web page or SNMP). Discrete lines for mute and turn on/off functionalities and summary alarm (Form C relay and discrete) are used for a quick operation.

Key Features

- High linearity
- Low size and weight
- Low power consumption
- Easy to maintain
- Redundant systems available
- Weatherproof

TECHNICAL SPECIFICATIONS

OPTIONS:

- Internal 10MHz reference
- Remove Linearizer
- Ethernet interface
- Extended temperature range (from -40ºC to +60ºC)
- Handheld
- Redundant systems
- Remote M&C Pane
- Forward and reverse output power monitoring
- Automatic Control Mode (AGC, ALC)

ELECTRICAL

Input frequency range	950 MHz – 1525 MHz
Output frequency range	5.85-6.425 GHz
Saturated Output Power (P_{SAT})	
100W / 200W / 400W	50 dBm / 53 dBm / 56 dBm
Linear Output Power (P_{LINEAR}) *	
100W / 200W/ 400W	48 dBm / 51 dBm / 54 dBm
Gain	> 70 dB
Gain Flatness	3 dB p-p max over full band; 1dB p-p max over any 40MHz
Gain variation over temperature	± 1.5 dB over full operating range
Attenuation Adjustment Range	20dB in 0.25dB step
Input VSWR	≤1.5:1
Output VSWR	≤1.3:1
Third order IMD (two tones)	-25 dBc two signal 5 MHz apart @ Linear Power
Spectral Regrowth	30 dBc @ Linear Power
Noise figure	15 dB
Spurious	-60 dBc max @ Linear Power
Harmonics	≤ 50 dBc
Phase noise	-65 dBc/Hz at 100 Hz, -85 dBc/Hz at 1 kHz, -90 dBc/Hz at 10 kHz, -95 dBc/Hz at 100 kHz

* Linear Output Power, defined as per MIL-STD-188-164B, is the power at which the IMD = -25 dBc for two CW signals 5 MHz apart and the spectral regrowth is < -30 dBc @ 1.0 x symbol rate for a single QPSK/OQPSK/8PSK signal.

POWER SUPPLY

Input voltage	220 VAC
Power consumption @ P_{SAT}	
100W / 200W / 400W	400W / 800W / 1600W
Power consumption @ P_{LINEAR}	
100W / 200W /400W	300W / 600W / 1300W

INTERFACES & PHYSICAL

Dimensions (L x W x H)	
100W / 200W / 400W	300x230x175 mm (11.8"x9"x6.8") / 400x300x200 mm (7"x11.8"x7.8") / 580x250x200 mm (22.8"x9.4"x7.8")
Weight	
100W / 200W /400W	<10,5 kg (23.5 lbs) / <15 kg (33 lbs) / <25 kg (55 lbs)
RF Input interface	Type N
RF Output interface	CPR-137
Monitor & Control interface	MIL-C-26482-I compatible, Size 14, 19 pins female
Power supply interface	MS3112E12-3P

ENVIRONMENTAL

Operating temperature	-40ºC to +55 ºC
Storage temperature	-40ºC to +85ºC
Humidity	100% Condensing

Information contained in this document is subject to change without notice. For more detailed information, please contact **comercial@ttinorte.es**

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