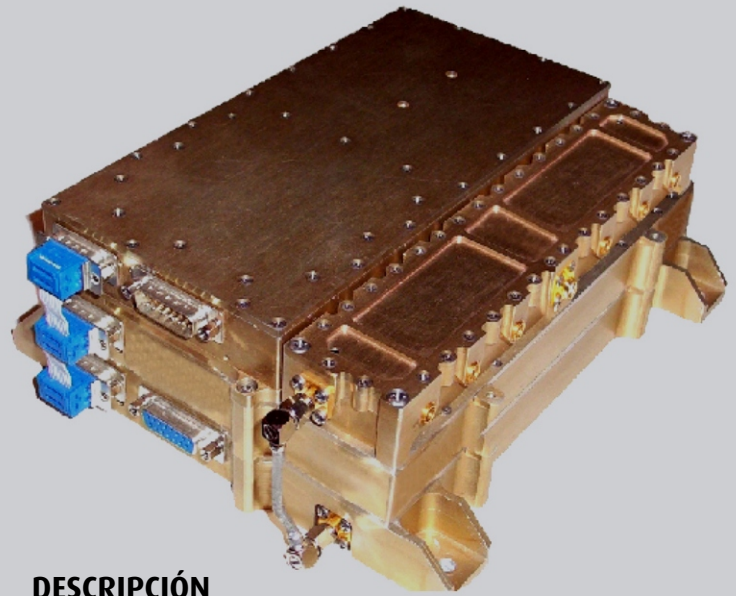


Transceptor Banda S

S Band Transponder

CFSTRX03



DESCRIPTION

Light & compact module having radiation hardened components & FPGA technology.

Carrier modulation in Linear PM with a 64KHz subcarrier BPSK modulated at 4Kbps data rate; demodulation: linear PM 16KHz BPSK subcarrier 4Kbps.

High efficiency linear GaAs FET 6 Watts amplifier.

Raised cosine pre modulation filter.

Linear amplification and output filtering ensure clean channel and low spurious for efficient spectral use.

Low component count to ensure high MTBF.

Meets FCC, ITU and NTIA emission standards.

DESCRIPCIÓN

Módulo transceptor liviano y compacto con componentes resistentes a radiación ionizante y tecnología FPGA.

Modulación de portadora PM lineal por una subportadora con de 64KHz modulada en BPSK a una tasa de 4Kbps; demodulación de PM lineal, BPSK sobre 16KHz con 4Kbps.

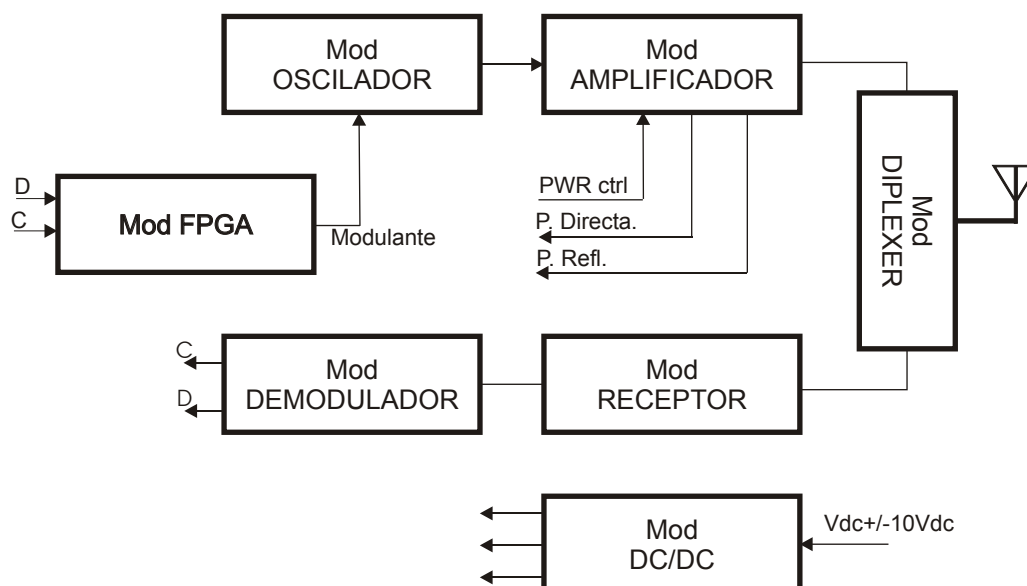
Amplificador lineal de potencia de alta eficiencia de 6 Watts implementado con FET de Arseniuro de Galio.

Cantidad de componentes minimizada para una alta confiabilidad.

Cumple estándares de emisión de FCC, ITU y NTIA.

Diseño flexible para adaptarse a necesidades del cliente.

Diagrama de Bloques



Transceptor Banda S

S Band Transceptor

RECEIVER/DEMODULATOR

Receive Frequency :	2025 to 2110 MHz
Carrier Tracking Range :	+/- 140 KHz
Carrier Acquisition Threshold :	< -120 dBm
Carrier Tracking :	<-120 dBm
Acquisition Rate :	35 KHz MAX
Acquisition Time :	8 sec. max
Noise Figure :	5 dB max
Dynamic Range :	60 dBm
Signal Input :	-120 to -60 dBm
Maximum Signal Input :	0 dBm
Spurious Response :	>60 dB

Command Channel

Modulation Index :	1.35 radians.
Sub-carrier Frequency :	16 KHz
Data Rate :	4000 bps
Threshold (10-5 BER) :	-118 dBm at 1 rad. mod

TRANSMITTER/BASEBAND

Transmitter Frequency :	2200 to 2300 Mhz
Frequency Stability :	< +/- 20 ppm
RF Power :	5 Watts min. standard
Output Protection No damage :	open or short circuit
IPM :	<3.5 rms (ambient)
IAM :	<1%

Telemetry Channel

Bandwidth :	100 Hz 10 MHz
Peak Phase Deviation :	Linear PM, Adjustable to 3 radians.
Subcarrier Frequency :	64 KHz
Subcarrier Stability :	+/-0.005%
BPSK max. :	20 dB carrier null
Modulation Rates :	4Kbps max.
(Clock and Data TTL Levels)	

Command Input

Transmitter ON/OFF :	External switch closure
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Telemetry Outputs

Temp (Pt2000)
Forward RF Power Output
Reverse Power
DC Converter Voltage.

GENERAL

Mass :	2,8 Kg
Dimensions :	238 x 196 x 80 mm3

La empresa se reserva el derecho de introducir cambios en las especificaciones.
All specifications are subject to change without notice.



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