SATELLITE PRODUCTS

Series SATCOM

The Satcom series of airborne amplifiers operate over the INMARSAT frequency Range of 1626.5 to 1660.5 MHz. Their designs utilizes linear amplifier technology (class AB) for amplification of multiple input carriers. These amplifiers provide the lowest distortion (IMD) with the highest efficiency possible. Their light weight and compact size make them suitable for airborne applications where weight and size are essential.

Aero-H High Speed Data Amplifier

Aero-I High Speed Data Amplifier

ELECTRICAL

Frequency Range	1626.5 to 1660.5 MHz
Output Power	60W CW ±0.5dB, two Carriers, 30W Each
Intermodulation	2 30W Carriers -25dBc
Class of Operation	Class "AB" Linear
Output Power Reporting	.±1.0dB, 16dB Dynamic Range
Gain	60 ±2 dB
RF Input Overdrive	+20 dBm
RF Input Low Level Detection	-30 dBm ± 2 dB
RF Input Range	-12 dBm for Nominal 60W Output
Gain Stability/Variation	±1.0 dB Frequency, Temperature, Time
AM/PM Conversion	2°/dB or 30°/2msec
Spurious	-55 dBc, <1530 MHz, >1559 MHz -83 dBc 1530 MHz to 1559 MHz
Harmonics	-50 dBc Max. 0-5,000 MHz -55 dBc Max. 5,000 to 18,000 MHz
Noise Figure	<20 dB for 0 dB Backoff
Input VSWR	2.0:1 Max.
Load VSWR	2:1 any Phase. Fully Protected into any VSWR
AC Input	115 VAC, 400 Hz
Heat Dissipation	300W Max. at 60W RF Output
Cooling	External Force Air
Control/Status	Output Power Reporting VSWR Reporting Individual Device Failure Internal Shutdown Temperature Reporting Transmit Enable
Weight	Less than 10 pounds
Size	12.5" x 10.2" x 7.6"
MTBF	30,000 Hours
Construction	Field Replaceable Modules
Qualification	RTCA DO-160D
Temperature	-40 to +70°C
Altitude	55,000 feet

Specifications are subject to change without notice.

- ***ARINC 429 compatible (60W Model)***
- ***Linear operation (Low IMD)***
- ***RTCA DO-160 D Qualified***

ELECTRICAL

Frequency Range	1626.5 to 1660.5 MHz
Output Power	25W CW ±0.5dB
Intermodulation	2 12.5W Carriers -26dBc
Class of Operation	Class "AB" Linear
Output Power Reporting	±1.0 dB
Gain	34 ±3 dB
RF Input Overdrive	+10 dBm
Gain Stability/Variation	±1.0 dB Frequency, Temperature, Time
Remote Muting	Muted Power, < -41.5 dBw
AM/PM Conversion	2°/dB or 30°/2msec
Spurious	.-55 dBc, <1530 MHz, >1559 MHz -83 dBc 1530 MHz to 1559 MHz
Harmonics	-50 dBc Max. 0-5,000 MHz -55 dBc Max. 5,000 to 18,000 MHz
Noise Figure	<10 dB
Input VSWR	2.0:1 Max.
Load VSWR	2:1 any Phase. Fully Protected into any VSWR
DC Input	+25V dc @ 6 Amps Max. +15V dc @ 500 ma Max. -15V dc @ 200 ma Max. +5V dc @ 100 ma Max.
Heat Dissipation	115W at 25W RF Output
Cooling	External Force Air
Control/Status	Output Power Reporting VSWR Reporting Internal Shutdown Temperature Reporting Transmit Enable
Weight	Less than 10 pounds
MTBF	30,000 Hours
Construction	Field Replaceable Modules
Qualification	RTCA DO-160D
Temperature	-40 to +70°C
Altitude	55,000 feet