



## S BAND ON-BOARD

## POWER AMPLIFIER

## DMR\_S-BAND\_20\_PA



Release .5

Ref:DMR\_S-Band\_20W\_PA\_R5

### •Variable Power Option Available.

3 steps and RF power off (40 dBm, 41.7 dBm and 43 dBm) (accuracy  $\pm 1$  dB).

### •Extended DC Power Supply Option Available.

From 18 V to 36V DC

## RF SPECIFICATIONS

Frequency range : 2185 to 2475 MHz  
RF output power: up to 20 W ( 43 dBm  $\pm 1$  dB ) all conditions.

RF input power: 100 mW to 4 W.

VSWR in/out < 1.8:1

Load mismatch (RF = open or short): no degradation, internal isolator.

Modulation: constant envelope (FM, SOQPSK).

Spurious outputs: In accordance IRIG106-96 ( -60 dBc).

## POWER REQUIREMENT

28 V DC ( 28 V DC  $\pm 4$  V ).

Current: < 3 A at 28 V DC.

(2.3 A at 28 VDC, 25°C, 2350 MHz and 20 W RF output power).

(2 A at 28 VDC, 25°C, 2350 MHz and 15 W RF output power).

(1.7 A at 28 VDC, 25°C, 2350 MHz and 10 W RF output power).

( with RF output power at  $\pm 1$  dB accuracy )

Reverse polarity protection

## ENVIRONMENTAL CONDITIONS

Operating temperature range: - 40 to +85° C.  
( baseplate ).

Operating Humidity: 0 to 95 % non condensing.

Vibration: 20 Hz to 2000 Hz:

19.6 g random 3 axes.

Shock:  $\frac{1}{2}$  sinus 5 ms, 60 g 3 axes.

Acceleration: 60 g 3 axes.

Altitude: 100 000 ft maximum.

## MECHANICAL

Dimensions ( L x h x l ): 99 x 63.5 x 33 mm without heatsink and connectors, need thermal resistance below 0.35°K/W for reliable operating without permanent damage and keep baseplate below 85°C.

Weight: <1.25 kg with heatsink

Weight: 0.4 kg without heatsink

RF output connector: SMA(F), optional N(F)

RF input connector: SMA(M).

MDM 15 type connector

DC Power, Control Signals (RS232).

\*Specifications subject to change without notice.