

# **DATA SHEET**

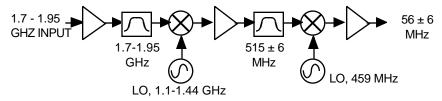
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# Model 2089-17 Agile Downconverter

The 2089-17 Agile Downconverter converts a 1700 to 1950 MHz signal to 56 ± 6 MHz in 1MHz steps.

#### **EQUIPMENT DESCRIPTION**

The 2089-17 Agile Downconverter converts a 1700 to 1950 MHz signal to 515 MHz in 1MHz steps with a low side 1185 to 1435 MHz first LO and then to  $56 \pm 6$  MHz with low side 459 MHz LO. Up and down tune push buttons control the output frequency displayed on the LED indicators . Frequency selection can be remotely selected via a RS232C data input. A red LED PLL alarm lights when the PLL is unlocked and goes to an open drain FET output. A Yellow LED indicates remote operation.



2089-17 Down Converter Block Diagram

### **EQUIPMENT SPECIFICATIONS\***

 $\begin{array}{lll} \mbox{Input Characteristics} & 2089-17 \\ \mbox{Input Impedance/RL} & 75 \,\Omega\,/10 \mbox{db} \\ \mbox{Frequency} & 1700 - 1950 \mbox{ MHz} \\ \mbox{Noise Figure} & 15 \mbox{ dB Max, 12 dB typ} \\ \mbox{Input Level, range} & -25 \mbox{ to -60 dBm} \\ \mbox{Input 1dB/3RD ORDER} & -25 / -15 \mbox{ dBm} \end{array}$ 

**Output Characteristics** 

Impedance/RL 75  $\Omega$ /15db

Frequency ,IF out 56 ± 6 MHz (other IF's, BW's available)
Output Spurious <-40 dBC in band, <-25 dBC in band at low input

Level with -30dBm in -5 dBm,  $\pm 2 \text{ dB}$ Output 1dB/3RD ORDER +5/+15 dBm

**Channel Characteristics** 

Gain  $+25 \text{ dB} \pm 2 \text{ dB}$ Frequency Response  $\pm 0.5 \text{ dB}, 8 \text{ MHz}$  band.

Synthesizer Characteristics

Frequency Accuracy ± 10 kHz max

Phase Noise (dBC/Hz) ≤-75, 10 kHz; ≤-90, 100 kHz; ≤-100, 1 MHz

Frequency Selection 1 MHz min steps

Reference Frequency 25 MHz; 10 MHz external reference TBA

Indicators

DC Power Green LED PLL Alarm Red LED

Frequency four, 7 segment LED displays

Other

RF in, IF out Connectors F, female, F, female

Size 19" wide X 1.75" high X 13.0" deep Power 90 to 260 VAC, 50 to 60 Hz, 30 watts

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<sup>\*+10</sup> to +40 degrees C; 2000 meters max elevation; 80% max humidity; Pollution Degree 2; Specifications subject to change without notice