

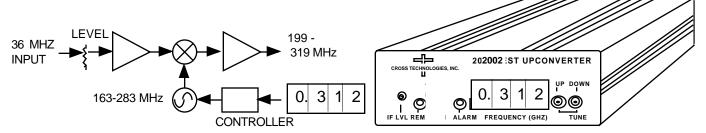
## **DATA SHEET**

4/2/01

# 2002-32, -33 Agile Test 0.2 -0.3 GHZ UPCONVERTER

#### **EQUIPMENT DESCRIPTION**

The 2002-32 and -33 convert a 36 MHz IF signal to 199 to 319 MHz in 1MHz steps with a low side 163 to 283 MHz LO. The IF input is mixed with a synthesized 163 - 283 MHz local oscillator signal. Up and down tune push buttons control the output frequency displayed on the LED indicators. PLL alarm lights red LED when the PLL is unlocked and goes to an open drain FET output. IF to RF gain is +3 dB. Powered by a wall power supply; connectors are BNC female. The **2002-32** includes a wall power supply and the **2002-33** takes an external power supply. Rack mount **option -R**.



### 2002-32, -33 Agile Test Upconverter Block Diagram and Chassis

### **EQUIPMENT SPECIFICATIONS\***

Input Characteristics

Input Impedance/RL 75 /15db Frequency 36 MHz center Input Level -10 to -20 dBm Input 1dB/3RD ORDER +0/+10 dBm

**Output Characteristics** 

Impedance/RL 50 /10db Frequency Band 199 -319 MHz

Level fixed -12dBm, with -15 dBm in

**Channel Characteristics** 

Gain, max  $+3 dB \pm 2 dB$ 

Spurious Response NA; output not filtered

Frequency Response ±2 dB, 199 -319 MHz; ±0.5 dB, any 10 MHz increment

Synthesizer Characteristics

Frequency Accuracy ± 10 kHz maximum Frequency Step ± 1.0 kHz minimum

Phase Noise Suitable for 64 kB/s QPSK with 1/2 rate FEC

Controls

Frequency Selection PB switches w/direct frequency readout Output Level Potentiometer for small adjustments

Indicators

PLL Alarm Red LED
Remote Yellow LED

Frequency Four digit display shows desired output frequency in GHz

Other

RF, IF Connectors BNC, female

Size, Bench Top 4.7" wide X 1.75" high X 12.5" deep

Size, Rack Mount (-R) 19 inch standard chassis 1.75"high X 13.0" deep (Optional) Power, for -32 120 ± 10% VAC, 60Hz, 20 watts max, wall mount power supply

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<sup>\*+10</sup> to +40 degrees C; Specifications subject to change without notice