

SR 20C 450 : Technical Specifications

The SR 20C 450 is fully synthesized and can be operated in any frequency within the specified band of operation. The SR 20C is frequency agile and can be programmed easily to any operating frequency in the band of interest.



RF SPECIFICATIONS

Frequency Band:

430-480 MHz

Frequency Programming:

Increments:

1 Hz

Accuracy:

± 0.00025% of center frequency

Change Time:

<2 seconds

Receive Bandwidth:

125-250 KHz, depending on selected frequency

Deviation:

[spec]

Stability over Operating Temperature range:

± 0.0001%

Sensitivity:

50 dB Signal-to-Noise:

4 µVs

60 dB Signal-to-Noise:

14 µVs

Max Signal-to-Noise (typically 75 dB or greater):

100 µVs

AUDIO SPECIFICATIONS

Type of technology to produce carrier:

Phase-locked loop (synthesized)

Spurious Response:

-90 dB

Mono Operation:

Connector Type:

15-pin D connector or external terminal strip

Output Impedance:

Balanced 600 Ohms

Output Level:

-10 dBm to +11 dBm

Frequency Response (20 Hz to 15 kHz):

±0.2 dB

S/N Ratio @ 100 µV Input:

200 kHz BW @ 50 kHz Dev:
>75 dB

125 kHz BW @ 15 kHz Dev:
>64 dB

125 kHz BW @ 9 kHz Dev:
>60 dB

THD + Noise:

200 kHz BW @ 50 kHz Dev:
0.25% or less, 20 Hz to 15 kHz

125 kHz BW @ 15 kHz Dev:
0.3% or less, 20 Hz to 15 kHz

125 kHz BW @ 9 kHz Dev:
0.3% or less, 20 Hz to 15 kHz

Composite:

Connector Type:
BNC connector, unbalanced Female

Impedance:
75 Ohm

Output Level:
0.25 Vpp to 8 Vpp

Frequency Response:

Composite:
±0.2 dB, 30 Hz to 53 kHz

Wideband:
±0.3 dB, 30 Hz to 100 kHz

S/N Ratio:

>75 dB, dependent upon operating frequency, demodulated, deemphasized

THD + Noise:

0.2% or less, 20 Hz to 15 kHz, demodulated, deemphasized, low-pass filtered, left or right channel

Separation:

250 kHz BW:
-55 dB @ 400 Hz; -52 dB, 50 Hz to 15 kHz

200 kHz BW:
-50 dB, 50 Hz to 15 kHz

IMD:

75 dB for 20 dB signal-to-noise

Image Rejection:

100 dB

MECHANICAL/PHYSICAL

RF Input Connector:

Type N Female

Accessory Connector:

15-pin D connector or terminal strip

Output Connector:

15-pin D connector or terminal strip

Dimensions (Unpacked):

3.5"H x 19"W x 15.5"D (8.9cm H x 48.3cm W x 39.4cm D)

Weight (Unpacked):

7.8 lbs (3.5 kg)

ENVIRONMENTAL

Operating Temperature:

-20° C to +50° C

Altitude:

10,000 ft (3048m) max

Humidity:

95% maximum, non-condensing

ELECTRICAL

Voltage:

AC Operation:

85-264 VAC; 47-63 Hz

DC Operation:

+10 to +14 VDC (Via D Connector)

Current Draw:

1.5 A

Power Consumption:

150 Watt Max