

# Spectrum Compact 70-87 GHz

J0SSAP80 datasheet



## Measurements

- Channel Power (measures the total power in a specified bandwidth)
- Adjacent channel power
- Signal bandwidth
- Center frequency
- Interference detection
- Mask

## Setup Parameters

- Frequency: Center/Start/Stop
- Trace mode: Normal, Max hold, Cumulative, # of Averages
- Span: Max Span, Min Span, Selected Span

## Save

- Proprietary format
- Saves actual data
- Continuous sweep record

## Sweep Functions

- Sweep: Continuous, Manual Trigger

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Product features may vary between different models and configurations. They are subject to change without prior notice.

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## Trace Functions

- Trace operations: Normal, Max hold, # of Averages, Cumulative

## Marker Functions

- Marker: Peak search, set marker to center

## Settings

- Detector MIN, AVG, MAX
- Signal ID

## Remote control

- Spectrum Manager PC software
- API commands

<b>Frequency</b> <ul style="list-style-type: none"><li>▪ <b>Frequency Range</b> 70 000 – 87 000 MHz</li><li>▪ <b>Frequency Resolution</b> 10 MHz</li><li>▪ <b>Frequency Reference</b> Aging <math>\pm 1.0</math> ppm/1 year Accuracy: <math>\pm 2.5</math> ppm (<math>25^{\circ}\text{C} \pm 25^{\circ}\text{C}</math>) + aging</li><li>▪ <b>Frequency span</b> 1000 MHz to full</li></ul>						
<b>Bandwidth</b> (Performance Sweep Mode) <ul style="list-style-type: none"><li>▪ <b>RBW</b> 10 MHz</li><li>▪ <b>VBW</b> 300 kHz;</li></ul>						
<b>Amplitude Ranges</b> <ul style="list-style-type: none"><li>▪ Measurement Range DANL to -30 dBm</li></ul> Amplitude Accuracy (single sine wave input, Performance Sweep Mode) 20° C to 30° C Typical: $\pm 1$ dB						
<b>VSWR</b> at 71 000 MHz < 3.0 typ. at 86 000 MHz < 1.4 typ.						
<b>SSB Phase Noise on RF input</b> <table><tr><td></td><td>20°C to 30°C</td><td></td></tr><tr><td>Carrier offset</td><td>100 kHz offset</td><td><math>\leq -80</math> dBc/Hz</td></tr></table>		20°C to 30°C		Carrier offset	100 kHz offset	$\leq -80$ dBc/Hz
	20°C to 30°C					
Carrier offset	100 kHz offset	$\leq -80$ dBc/Hz				
<b>Maximum Input Level</b> <table><tr><td>DC voltage</td><td>0 V</td></tr><tr><td>CW RF power</td><td>-30 dBm (0.001 mW),</td></tr><tr><td>Max. Damage level</td><td>0 dBm (1mW)</td></tr></table>	DC voltage	0 V	CW RF power	-30 dBm (0.001 mW),	Max. Damage level	0 dBm (1mW)
DC voltage	0 V					
CW RF power	-30 dBm (0.001 mW),					
Max. Damage level	0 dBm (1mW)					
<b>Displayed Average Noise Level (DANL)</b> AVG detector, trace average 16, 20°C to 30°C, input impedance = 50 $\Omega$ -90 dBm @ RWB = 10 MHz						

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<b>Level Display</b>	
Trace detectors	AVG; MAX; MIN
Trace functions	Clear write, max hold, average, cumulative, min/max hold
<b>Frequency response</b>	
300 – 3000 MHz; amplitude accuracy $\pm 1$ dBm	
<b>RF Input Connector</b>	
Impedance	50 $\Omega$ (nom.)
Connector	Waveguide flange UG387/U
<b>Sweep</b>	
Sweep time	
MIN SPAN=1000 MHz	MIN SPAN = 500 ms
<b>Display</b>	
Type	TFT LCD resistive touchscreen
Resolution	480 x 272
Size	4.3 inch (Diagonal)
Active area	95 x 53.8 mm
<b>Mass memory</b>	
8 GB	
<b>Input voltage</b>	
USB micro: 5V DC 1.5A	
DC input: 5.9V DC 3A	
<b>Interface</b> USB micro	
<b>Battery life</b> up to 3h	
<b>Operating temperature</b> -15°C to +55°C / 5°F to 131°F	
<b>Dimensions</b> 147 x 83 x 34 mm / 5.79 x 3.27 x 1.34 inch	
<b>Weight</b> 0.57 kg / 20.11 oz	

For more detailed information about SAF products visit [www.saftehnika.com](http://www.saftehnika.com) or contact your SAF representative [info@saftehnika.com](mailto:info@saftehnika.com). Product features may vary between different models and configurations. They are subject to change without prior notice.

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