

# Spectrum Compact 6-20 GHz v.2

JOSSAP52 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, Min/Max Hold
- Span: Max Span, Min Span, Selected Span

## Save

- Proprietary format
- Saves actual data

## Sweep Functions

- Sweep: Continuous, Manual Trigger

## Trace Functions

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

## Marker Functions

- Marker: Peak search, set marker to center

## Settings

- LNA ON/OFF
- ATT
- RBW, VBW
- Signal ID

SAF Spectrum Compact 6-20GHz datasheet

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<b>Frequency</b> <ul style="list-style-type: none"> <li>▪ <b>Frequency Range</b> 5 925 – 20 000 MHz</li> <li>▪ <b>Frequency Resolution</b> 30 kHz</li> <li>▪ <b>Frequency Reference</b> Aging <math>\pm 1.0</math> ppm/1 year Accuracy: <math>\pm 2.5</math> ppm (25°C <math>\pm</math> 25°C) + aging</li> <li>▪ <b>Frequency span</b> 1.5 MHz to full</li> </ul>											
<b>Bandwidth</b> (Performance Sweep Mode) <ul style="list-style-type: none"> <li>▪ <b>RBW</b> 30 kHz; 100 kHz; 300 kHz; 1MHz</li> <li>▪ <b>VBW</b> 1 kHz; 3 kHz; 10 kHz; 30 kHz; 100 kHz;</li> </ul>											
<b>Amplitude Ranges</b> <ul style="list-style-type: none"> <li>▪ Measurement Range DANL to +20 dBm</li> </ul> Amplitude Accuracy (single sine wave input, Performance Sweep Mode) 20° C to 30° C Typical: $\pm 1$ dB											
<b>VSWR</b> 5.925 – 20 GHz < 2.0											
<b>Input attenuator</b> 30 dB with 5 dB step											
<b>SSB Phase Noise</b> <table style="width: 100%; border: none;"> <tr> <td></td> <td style="text-align: center;">20°C to 30°C, Fc = 10 GHz</td> <td></td> </tr> <tr> <td style="width: 33%;">Carrier offset</td> <td style="width: 33%;">100 kHz offset</td> <td style="width: 33%; text-align: right;">&lt;-90 dBc/Hz</td> </tr> </table>				20°C to 30°C, Fc = 10 GHz		Carrier offset	100 kHz offset	<-90 dBc/Hz			
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<b>Maximum Input Level</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">DC voltage</td> <td style="width: 33%;">0 V</td> <td></td> </tr> <tr> <td>CW RF power</td> <td colspan="2">Attenuation = 30 dB ; + 20 dBm (100 mW), LNA = OFF</td> </tr> <tr> <td>Max. Damage level</td> <td colspan="2">+ 27 dBm</td> </tr> </table>			DC voltage	0 V		CW RF power	Attenuation = 30 dB ; + 20 dBm (100 mW), LNA = OFF		Max. Damage level	+ 27 dBm	
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<b>Displayed Average Noise Level (DANL)</b> Attenuation = 0 dB, RBW = VBW = 30 kHz /RBW= 1 MHz, VBW = 1 kHz, AVG detector, trace average 16, 20°C to 30°C, input impedance = 50 $\Omega$ <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;"><b>LNA ON</b></td> <td style="width: 85%;">5.925 GHz to 20 GHz -110 dBm @ 30kHz; -100 dBm @ 1MHz RBW typ.</td> </tr> <tr> <td><b>LNA OFF</b></td> <td>5.925 GHz to 20 GHz -90 dBm @ 30kHz; -75 dBm @ 1MHz RBW typ.</td> </tr> </table>			<b>LNA ON</b>	5.925 GHz to 20 GHz -110 dBm @ 30kHz; -100 dBm @ 1MHz RBW typ.	<b>LNA OFF</b>	5.925 GHz to 20 GHz -90 dBm @ 30kHz; -75 dBm @ 1MHz RBW typ.					
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<b>Level Display</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Trace detectors</td> <td style="width: 66%;">AVG; MAX; MIN</td> </tr> <tr> <td>Trace functions</td> <td>Clear write, max hold, average, cumulative, min/max hold</td> </tr> </table>			Trace detectors	AVG; MAX; MIN	Trace functions	Clear write, max hold, average, cumulative, min/max hold					
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<b>Frequency response</b> 5.925 – 20 GHz; amplitude accuracy $\pm 1$ dBm											
<b>LNA ON/OFF</b> Gain 5.925 – 20 GHz +20 dB											
<b>RF Input Connector</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Impedance</td> <td style="width: 33%;">50 <math>\Omega</math> (nom.)</td> <td></td> </tr> <tr> <td>Connector</td> <td colspan="2">SMA F</td> </tr> </table>			Impedance	50 $\Omega$ (nom.)		Connector	SMA F				
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<b>Sweep</b>	
Sweep time @ RBW=1MHz, MIN SPAN=50MHz	MIN SPAN <= 200 ms
<b>Display</b>	
Type	Touchscreen
Resolution	480 x 3 (RGB) x 272
Size	4.3 inch
Color arrangement	RGB-stripe
<b>Mass memory</b>	8 GB
<b>Input voltage</b>	5V DC 3A
<b>Interface</b>	USB Type-C
<b>Battery life</b>	up to 4h
<b>Operating temperature</b>	-15°C to +55°C / 5°F to 131°F
<b>Dimensions</b>	135 x 83 x 34 mm / 5.31 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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