# Spectrum Compact
Spectrum analyzers 2 - 40 GHz

- Essential tool for link troubleshooting
- Top choice for site survey and acceptance
- Perfect aid for installation and maintenance of antenna systems
- Industry leading -105 dBm receiver sensitivity
- Intuitive control and interactive GUI with instant On/Off functionality
- Resistive LCD touchscreen allows working with gloves on

<table>
<thead>
<tr>
<th>P/N</th>
<th>JOSSAP10</th>
<th>JOSSAP11</th>
<th>JOSSAP12</th>
<th>JOSSAP13</th>
<th>JOSSAP14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency range</td>
<td>2.000 - 8.000 GHz</td>
<td>5.925 – 12.000</td>
<td>10.000 - 18.000 GHz</td>
<td>17.000 - 24.300 GHz</td>
<td>24.000 - 40.000 GHz</td>
</tr>
<tr>
<td>Input dynamic range</td>
<td>-105 to -40 dBm</td>
<td></td>
<td></td>
<td></td>
<td>-100 to -40 dBm</td>
</tr>
<tr>
<td>Max. input power</td>
<td>0 dBm</td>
<td></td>
<td></td>
<td></td>
<td>0 dBm</td>
</tr>
<tr>
<td>RBW</td>
<td>1 MHz</td>
<td></td>
<td></td>
<td></td>
<td>1 MHz</td>
</tr>
<tr>
<td>VBW</td>
<td>300 kHz</td>
<td></td>
<td></td>
<td></td>
<td>300 kHz</td>
</tr>
<tr>
<td>Min. Span</td>
<td>100 MHz</td>
<td></td>
<td></td>
<td></td>
<td>100 MHz</td>
</tr>
<tr>
<td>Max. Span</td>
<td>full bandwidth</td>
<td></td>
<td></td>
<td></td>
<td>full bandwidth</td>
</tr>
<tr>
<td>Sweep speed</td>
<td>0.5s @ Min. Span</td>
<td></td>
<td></td>
<td></td>
<td>0.5s @ Min. Span</td>
</tr>
<tr>
<td>Accuracy</td>
<td>+/- 1 dB*</td>
<td></td>
<td></td>
<td></td>
<td>+/- 1 dB*</td>
</tr>
<tr>
<td>Input</td>
<td>50 ohm SMA (f)</td>
<td></td>
<td></td>
<td></td>
<td>50 ohm 2.92 mm (f)</td>
</tr>
<tr>
<td>Interface</td>
<td>mini USB 2.0 (1.1)</td>
<td></td>
<td></td>
<td></td>
<td>mini USB 2.0 (1.1)</td>
</tr>
<tr>
<td>Battery</td>
<td>2380 mAh Lithium Polymer</td>
<td></td>
<td></td>
<td></td>
<td>2 x 2380 mAh Lithium Polymer</td>
</tr>
<tr>
<td>Battery life</td>
<td>up to 4h</td>
<td></td>
<td></td>
<td></td>
<td>up to 3h</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-15ºC to +55ºC / 5ºF to 131ºF</td>
<td></td>
<td></td>
<td></td>
<td>-15ºC to +55ºC / 5ºF to 131ºF</td>
</tr>
<tr>
<td>Dimensions</td>
<td>128 x 81 x 24 mm / 5.04 x 3.2 x 0.94 in</td>
<td></td>
<td></td>
<td></td>
<td>130 x 81 x 28 mm / 5.11 x 3.2 x 1.1 in</td>
</tr>
<tr>
<td>Weight</td>
<td>0.3 kg / 10.6 oz</td>
<td></td>
<td></td>
<td></td>
<td>0.4 kg / 14.11 oz</td>
</tr>
</tbody>
</table>

**Regulatory compliance:**
*Climate class: Usage 7K2; Transportation 2K4*
*Mechanical class: 7M2*
*Guaranteed at 21ºC/70ºF CW signal*
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Frequency
- **Frequency Range**: 2-40 GHz
- **Tuning Resolution**: 1 MHz
- **Frequency Reference**: Aging ±1.0 ppm/1 year
  - Accuracy: ±2.5 ppm (25°C ±25°C) + aging
- **Frequency span**: 100 MHz to full
- **Sweep Time**: 0.5s – 100 MHz

**Bandwidth** (Performance Sweep Mode)
- RBW 1 MHz
- VBW 300 kHz

Amplitude Ranges
- Dynamic Range: -105 dBm to -40dBm/1 MHz 2-24 GHz, -100 to -40dBm/1 MHz 24-40
- Measurement Range: DANL to -40 dBm
- Display Range: 1 to 10 dB/div in 1 dB steps, ten divisions displayed
- Amplitude Units: LIN Scale Modes: dBm

Amplitude Accuracy (single sine wave input, Performance Sweep Mode)
- 20° C to 30° C Typical: ±1 dB
- -15° C to 55° C: ±3 dB

**DANL**

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-8 GHz</td>
<td>-105</td>
</tr>
<tr>
<td>6-12 GHz</td>
<td>-105</td>
</tr>
<tr>
<td>10-18 GHz</td>
<td>-105</td>
</tr>
<tr>
<td>17-24 GHz</td>
<td>-105</td>
</tr>
<tr>
<td>24-40 GHz (f&lt;35GHz)</td>
<td>-105</td>
</tr>
<tr>
<td>24-40 GHz (f&gt;35GHz)</td>
<td>-100</td>
</tr>
</tbody>
</table>

**Spurs** < -90 dBm

**Third-Order Intercept (TOI)**: -10 dBm

**VSWR**
- 2-24 GHz < 2.00
- 24-40 GHz < 3.00

**LO leakage @ RF port** <= -40dBm
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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, Fill
- Span: Full Span, Min Span, Selected Span

Save
- Proprietary format
- Saves actual data

Sweep Functions
- Sweep: Single/Continuous, Manual Trigger

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

Marker Functions
- Marker: Peak search, set marker to center

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