



Spectrum Compact

PAY LESS TO BECOME AGILE
spectrumcompact.com



SAF Tehnika Has 20+ Years of Experience in Wireless Link Deployment

T&M Test and Measurement
spectrumcompact.com

Key Facts:

- Global presence and extensive partner network in 130+ countries
- Large-scale production capabilities
- Custom solutions for our clients



Microwave radio
saftehnika.com



Internet of Things
aranet.com

Use Spectrum Compact for a Variety of RF Field Tests

1

Link
Troubleshooting

2

Signal Coverage
Testing

3

Radio Parameter
Verification

4

Interference
Hunting

5

Line of Sight
Verification

6

Precise Antenna
Alignment

Perfect T&M Solution for RF Field Tests

Fits in your hand, pocket or harness

Completely stand-alone in the field mode

Instant ON and data logging

Works perfectly with gloves

Battery time up to 4 hours



We offer a Complete and Customizable RF Solution Tailored to Your Needs

Spectrum Manager
PC Software & API



Spectrum Compact
Spectrum Analyzer



SG Compact
Signal Generator



CREATING A SOLUTION KIT

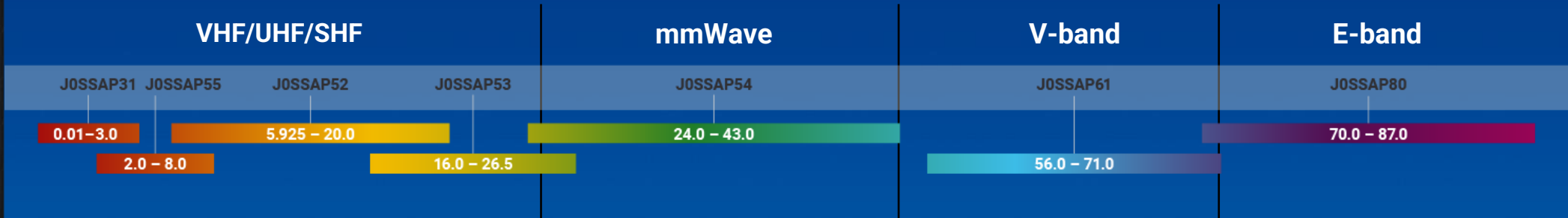


Accessories

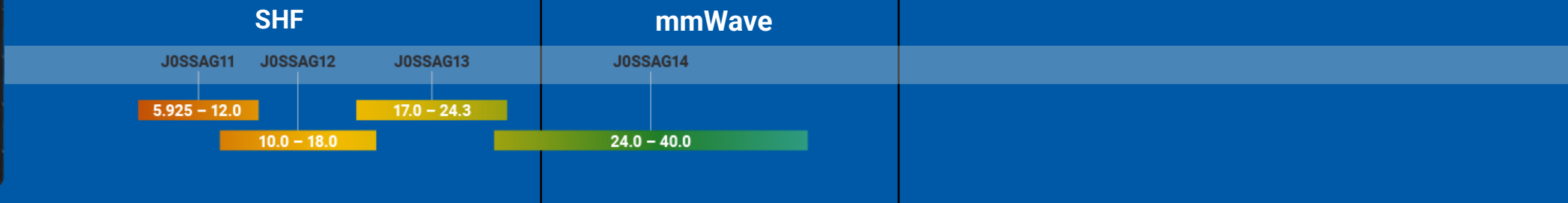
- ✔ **No extra software costs** and integration with 3rd party software via API
- ✔ **Standard 1 year guarantee** with the option to get an extension and experienced tech support
- ✔ **Quality assurance** guarantees device performance in a **-15-55°C (5-131F)** range

Pay Only for the MW Range You Actually Use

Spectrum Compact

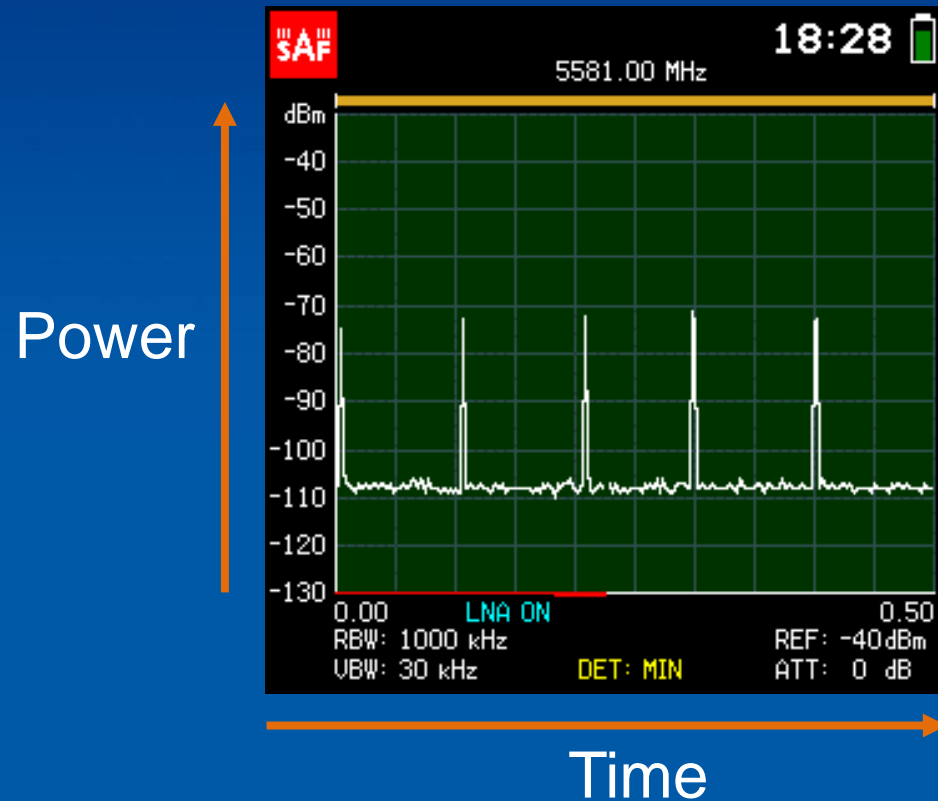


SG Compact



Zero-Span Feature for Spectrum Compact v2

Zero-Span view



Applications

- ✓ External PIM hunting
- ✓ Detection of TDD signals, e.g. Wi-Fi, 5G, LoRa
- ✓ Channel power measurement for narrowband signals
- ✓ Satellite antenna alignment

Save Time by Making Informed RF Decisions

Case Study: Interference Hunting with Spectrum Compact

1. CHALLENGE

The client's crew encountered a **high signal-to-noise ratio**. Possible cause – **interference**.

The source of interference might be tricky to locate by sight, especially in dense urban planning, and **a multimeter can't help**.



2. SOLUTION

The client opted for Spectrum Compact equipped with a directional horn antenna.

Spectrum Compact was used to **follow the interference** signal and **locate its source**.

Stand-alone and lightweight, it allowed staying **mobile without interrupting** measurements.

3. RESULTS



The clients report **40-70%** savings on time-related costs when spectrum analyzers were introduced for RF testing

Our main challenge is to increase base station capacity by **detecting and eliminating any interference problems** in the backbone point-to-point radio network.

Spectrum Compact is a **great tool** that has significantly **decreased our interference problems**.

lmt 

– **Gunars Afonins**, Deputy Head of Transmission Division, LMT



Save on Equipment Without Slowing Down the Work

Case Study: Site Inspection with Spectrum Compact

1. CHALLENGE

The client's **mmWave radio link was not functioning**, and the crew had no clear idea why.

The team only had funds to acquire the **sole expensive portable analyzer**, which was rarely available. It was mostly used for basic tests, leaving **most of its functions unused**.



2. SOLUTION

The client proceeded with purchasing **Spectrum Compact** that, due to its great price, allows **equipping more engineers with a spectrum analyzer**.

The team on site set it as quick as the time needed to attach the antenna: **first results received within 30 sec of pressing the ON button**.

3. RESULTS



Spectrum Compact provides everything necessary for the site inspection and

costs 6 times less

than mmWave portable analyzers

*Spectrum Compact is **efficient and effective** at the same time.*

*The troubleshooting **saved us time** and was done from the ground level which made it exceptionally convenient for our field engineers*

TELE2

– **Līga Krūmiņa**, CTO, Tele2



Problem-Specific Solutions for Straightforward Operations

Case Study: Line-of-Sight Verification Spectrum Compact Solution

1. CHALLENGE

The client needed to confirm that the calculated link path is clear from obstructions in the first Fresnel zone: buildings, tree canopies, etc.

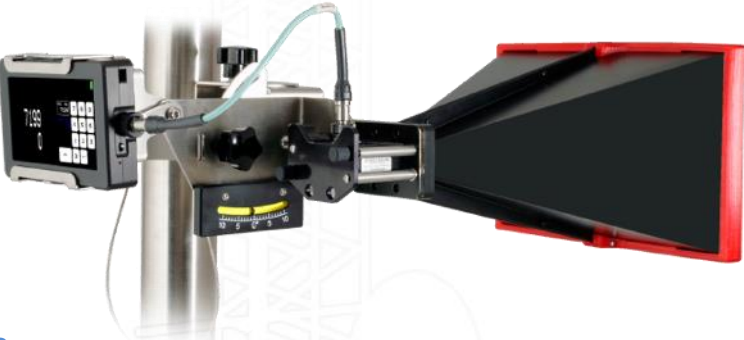
2. SOLUTION

Our proposed solution was SG Compact on transmitting end and Spectrum Compact on the receiving end with **specifically designed line-of-sight antennas**.

3. RESULTS



This setup was used to confirm that Fresnel Zone is not obstructed. This is a **reliable way to test for obstructions, interferences and multipath effect**.

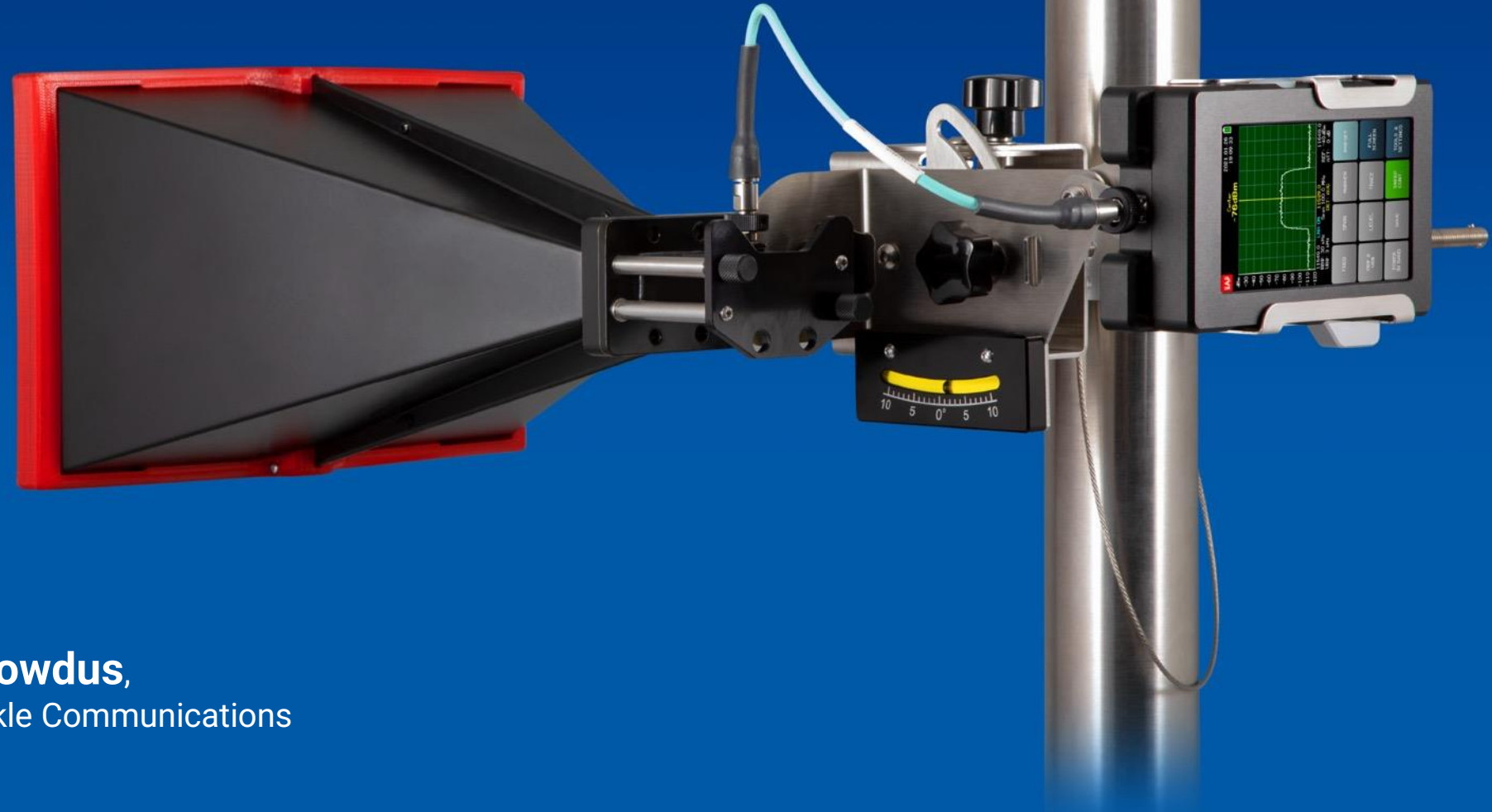


SAF's tailor-made solution:

- made using Spectrum Compact even **more precise and time-efficient**
- came with the **solution guide that deals with common problems**

We were so impressed with the loaned device that we bought our own spectrum analyzer.

It will pay for itself with the time saved on installing and servicing microwave equipment.



– Don Clodus,
CEO, Arbuckle Communications

Spectrum Compact Clients



BOSCH

SPACEX

verizon

SoftBank

Telefonica

Schneider Electric

Americatel

Ofcom

TELE2



Rai Way



Charter COMMUNICATIONS



WIND

FUJITSU

Imt



Freedom mobile

LANCOM East BERLIN



Frontier COMMUNICATIONS



NEXCOM
PT. Nexcom Indonesia

PTS

SWIFT NETWORKS

a sense for **IEE**
innovation

bm vti

EETT

NLST



DAIMLER FINLAND

CDOT COLORADO
Department of Transportation

REPUBLIC OF ESTONIA
TECHNICAL REGULATORY AUTHORITY



RYSIU REGULAVIMO TARYBA



DÖVLƏT RADIOTEZLİKLƏR İDARƏSİ
DRI



Thanks!

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