SignalShark + go2Signals Radio Monitoring Software

Mobile, compact, on site solution for radio monitoring (SignalShark + PC analysis software).

Situational awareness thanks to

- **Capture**
- **Classification**
- **Decoding**
- **Recording**

of complete wireless signal scenarios (HF, VHF, UHF, SAT) directly on site.

The Narda SignalShark is a highly sensitive measuring receiver that enables ITU compatible measurements of wireless signals at up to 8 GHz. With a real time bandwidth of 40 MHz, it can capture broadband signals despite its very small size. The VITA49 compatible IQ streams generated by it are classified and decoded by the go2Signals software running on an externally connected PC. This combination results in an unmatched compact and powerful radio monitoring solution.

The SignalShark receiver is available in several different models, for example:

- As a handheld unit, it is light, battery operated, and robust, making it ideal for the rough and tumble of operation in the field.

- As a remote unit with very small size and very low power consumption, it is ideal for operation as a so-called left behind unit or it can be fitted in a 19'' rack.

- As an outdoor unit with Power over Ethernet or solar panel powered, it is ideally equipped for 24/7 operation whatever the weather.

The go2Signals Radio Monitoring Software* provides all the analysis tools needed for comprehensive signal monitoring:

- Narrow- and broadband waterfall display for continuous monitoring of a frequency band

- Lossless recording of all broadband IQ data in real time

- Detection of signals in real time with modulation type calssification and signal tracking of all active signals in a frequency band. There are different options available for the go2Signals software regarding the real-time bandwidth of the channels and the number of channels.

PC not included in delivery

- Job-based fully automatic monitoring of entire frequency ranges

- Modular concept allows for versatile expansion

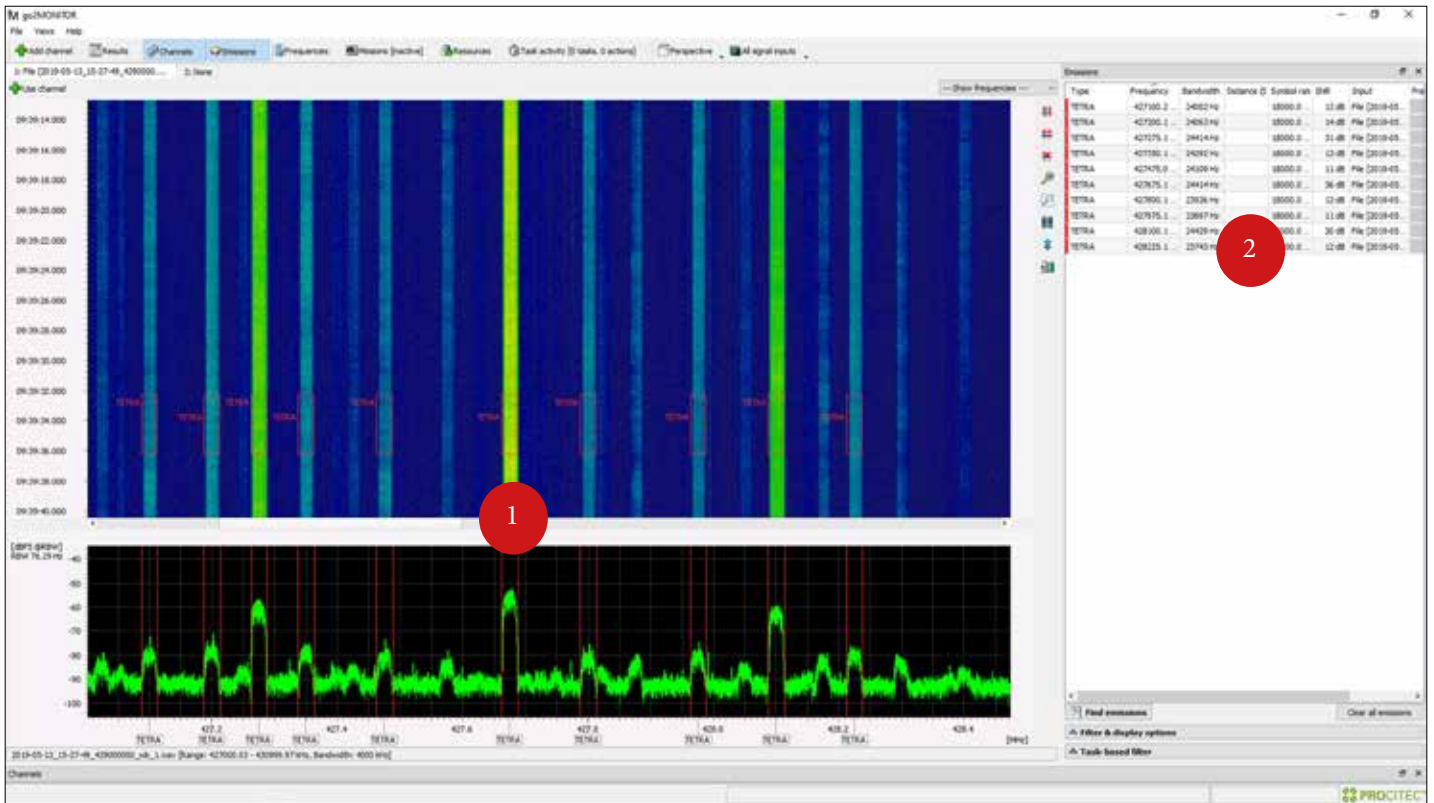|	Examples (exact, full description in the list of decoders from PROCITEC)	Classification	Decoding
RF decoder	ARQ, ASCII, Baudot, CIS, PSK,	x	x
VHF/UHF decoder	POCSAG, SELCAL,....	x	x
SAT decoder	INMARSAT, Iridium, Thuraya,...	x	x
PMR decoder	APCO-25, Tetra, Tetrapol,...	x	x
MIL decoder	MIL, STANAG, TADIL,...	x	x

*The software must be purchased from PROCITEC

➜ **The combination of the SignalShark with go2Signals therefore offers the ideal solution for e.g.:**

- **Regulators** — for monitoring the spectrum and tracing illegal, prohibited, or unwanted transmitters

- **Security services** — for tracking down illegal / secret communications

- **PMR network operators** — such as police / railroads / energy suppliers for management of their own networks

- **Border patrol** — for monitoring communications near to the border

- **Military** — for SIGINT and COMINT tasks

PC screenshot: Classification of signals using Tetra signals as an example

1. Broadband signal, shown as a waterfall diagram and as a FFT spectrum
2. List of classified signals

PC screenshot: Decoding of APCO P-25 signals (optional, available from PROCITEC)

1. Broadband signal, shown as a waterfall diagram and as a FFT spectrum
2. Production of the selected narrow band signal, Process detection and Decoding mode
3. Classification results: decoder / modem
4. Decoding of the contents starts after classification

> Note:
> The SignalShark available worldwide through Narda's network of Sales Partners: www.narda-sts.com
> The go2Signals software and further software options such as the PMR and MIL decoders can be requested directly from PROCITEC: www.procitec.de/en/
> You will also find complete descriptions of the individual components and possible upgrades on the above websites.

go2Signals Low SWaP:
- Runs on SignalShark.
- Serial processing of channels and signals.
- Stand-alone, on-site monitoring solution that does not require an Internet or network connection.