PROCITEC®
HOUSE OF SIGNALS

**Technical
Specifications**

Monitoring Suite
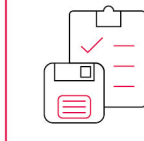
Product Version v22.2

July, 2022

go2signals

GO2MONITOR OVERVIEW

Narrowband Classification Results
Modem Recognition Results
Narrowband I/Q Recordings Results
Narrowband Production Results

Result Database

Wideband Classification Results

Wideband Recording Results

① Wideband Input

② Wideband Classification

③ Production of a selected narrowband signal in production channel

④ Automatic Monitoring and Tasking

⑤ ResulViewer

go2MONITOR PRODUCT CONFIGURATIONS

go2MONITOR 1/2/4/8	• Radio monitoring, signal classification, signal decoding and signal recording software solution for complete signal scenario surveillance (HF, VHF, UHF, SAT bands) • Core product includes all standard product features. • Optional product features can be added, see optional product features table further back in this brochure
go2MONITOR LOWSWAP	• Radio monitoring, signal classification, signal decoding and signal recording software solution for complete signal scenario surveillance (HF, VHF, UHF, SAT bands) optimized for low-SWaP equipment • See comparison table further back in this brochure

go2MONITOR OPERATOR	• Application to setup an additional workstation for processing radio signals and viewing the results stored in the central system
	• go2MONITOR Operator enables several users to access a central go2MONITOR 1/2/4/8 independently of each other and to process signals autonomously
	  - Shared access to the processing resources of a central go2MONITOR system
	  - Local use of free narrowband channels for independent signal processing
	  - Access to active wideband signal inputs (controlled centrally)
	  - Viewing and editing of all results in a common, central results database
	  - Installation on an additional workstation (access to the central system via network)
	  - The go2MONITOR Operator product includes one ResultViewer each
	  - With the NRC option it is also possible to assign handoff receivers directly to an operator
	• Recommended computing resources: client workstation/notebook with Intel i5 or higher (launch date not older than 3 years), 4 CPU cores with min. 2 GHz clock rate per core, 16 GB RAM and access to the central system via network and Full HD screen

go2MONITOR RESULT	• ResultViewer application to setup an additional workstation for viewing the results stored in the central system
	• go2MONITOR Result enables several users to access the result data of a central go2MONITOR 1/2/4/8 or LowSwaP independently of each other and to jointly process its results:
	  - Shared access to a central go2MONITOR result database
	  - Viewing and editing of all results
	  - Work in parallel while creating new results in the central database
	  - Listen to audio, even from IF recordings
	  - Display filtered and grouped results, graphical and table view, data export
	  - Installation on an additional workstation (access to the central system via network)
	  - The ResultViewer application can display the results of multiple databases (not simultaneously)
	• Recommended computing resources: client workstation/notebook with access to the central system via network and Full HD screen

SIGNAL CLASSIFIER LIBRARY (SCL)	• C++ library for integration of automatic signal classifier functionality
	• Multi-stage classification concept:
	  - Signal detection and segmentation
	  - Classification of modulation types
	  - Classification of modems
	• Input:
	  - Digital IF (complex I/Q) via memory buffer
	  - Digital IF/AF recordings (real / complex WAV 8, 16, 32 Bit)
	• Faster than real-time processing depending on hardware performance
	• Recommended computing resources: Intel i5 or higher (launch date not older than 3 years), min. 2.6 GHz clock rate per core, 1 Core per SCL channel

The performance of our software products depends on the hardware used. Technical parameters can differ under real operational conditions.
The parameters specified are limit values that cannot be guaranteed in all combinations. Specifications subject to change.

3

go2signals

go2MONITOR STANDARD

GUI	• Customize GUI and software workflow:
	  - GUI layouts and perspectives depending on use cases
	  - Modem list editor
	  - Frequency list manager
	• Supports multiple monitors
	• Simple and intuitive to operate
	• Full drag-and-drop support
	• Language: English or German

RECOMMENDED COMPUTING RESSOURCES	• CPU: Intel i5 or higher (launch date not older than 3 years), min. 2.6 GHz clock rate per core. 1 core per demodulation and decoding channel • 4 GB plus 2 GB RAM per demodulation and decoding channel • HDD/SSD: min. 100 GB or more, depending on total time of signal recording • Screen Resolution: Full HD, multiple monitors recommended • Network: depending on digital IF input bandwidth
OS	• Windows 10/11 de/en, 64 bit • CentOS Linux 7 (7.5 or higher, 7.5 is recommended), 64 bit • Red Hat Enterprise Linux RHEL 8 (8.4 or higher, 8.4 recommended), 64 bit
LICENCE	• USB-Dongle (CodeMeter) as default • Optional: License sharing with license server • The AMBE+2™ voice coding Technology embodied in this product is protected by intellectual property rights including patent rights, copyrights and trade secrets of Digital Voice Systems, Inc. This voice coding Technology is licensed solely for use within this Licensed Product. The user of this Technology is explicitly prohibited from attempting to extract, remove, decompile, reverse engineer, or disassemble the object code, or in any other way convert the Object Code into a human-readable form. US Patent Nos. #8,595,002, #8,359,197, #8,315,860, #8,200,497, #7,970,606, #6,912,495 B2, #6,199,037.
ISO 9001:2015	• Company is certified

go2MONITOR STANDARD PRODUCT FEATURES

RECEIVER CONTROL	• Native supported receivers, see further-back • Generic receiver control (frequency, bandwidth, gain, etc.) • Step and scan mode • PSD receiver overview display • Parallel use of receivers from different vendors possible • Support of wide- and narrowband receivers • Hand-off receiver input as additional option: NRC-4/8

WIDEBAND INPUT, CLASSIFICATION AND RECORDING	• Data Acquisition:
	  - Digital IF (complex I/Q) via stream or receiver
	  - Digital IF/AF recordings (real / complex WAV 8, 16, 32 Bit, TCI cap file format)
	  - 2 wideband inputs in parallel
	• Input bandwidth:
	  - Coherent 5 MHz (1 MHz HF)
	  - Up to 20 MHz (2.4 MHz HF) as additional option: WCL-10/20
	  - Depending on receiver and hardware resources in product configuration: go2MONITOR low SWaP
	• Waterfall and spectrum display with information like station names and classifier results
	• Classification of modulation and modem types
	• Classification modes:
	  - Manually triggered
	  - Interval snapshots (at 10, 20,… . sec)
	  - Continuous classification as additional option: AMT
	  - Sequential snapshot classification in product configuration: go2MONITOR low SWaP
	• Recording:
	  - Coherent 5 MHz (1 MHz HF)
	  - Up to 20 MHz (2.4 MHz HF) as additional option: WBR-10/20
	• Hopper detection as additional option pre-requires WCL-20, WBR-20 and AMT
	• Recommended min. input bandwidth 50 kHz

MULTI CHANNEL PROCESSING	• 1, 2, 4 or 8 channels
	• Other channel configurations on request
	• Data Acquisition:
	  - Internal DDC I/Q stream from wideband input
	  - Digital IF (complex I/Q) via stream
	  - Digital IF/AF recordings (real / complex WAV 8, 16, 32 Bit)
	  - Hand-off receiver input as additional option: NRC-4/8
	• Signal bandwidth: 2 kHz - 4 MHz
	• Additional functions:
	  - Live audio listening (analogue and digital voice)
	  - Digital IF I/Q recording
	  - Demodulated bit recording
	  - Live signal analysis (Raster display, I/Q display)
	  - Links to station names from frequency list
	• Operation modes:
	  - Classification only
	  - Decoding only
	  - Modem recognition and decoding
	  - Full automatic (classification, modem recognition, decoding)
	  - Analogue audio only in product configuration: go2MONITOR low SWaP
	• Result feedback in GUI and database

The performance of our software products depends on the hardware used. Technical parameters can differ under real operational conditions. The parameters specified are limit values that cannot be guaranteed in all combinations. Specifications subject to change.

5

go2MONITOR STANDARD PRODUCT FEATURES

DEMODULATION AND DECODING	- Universal demodulators: - AGC, AFC and automatic baud rate synchronization - Blind or modem specific equalization - Pre-parametrized related to the selected decoder/modem - Extensive list of available standard decoders - PMR/SAT and MIL decoder packages as additional option - Latest decoder list: www.procitec.com/go2signals-decoderlist - Special decoder functions: - Automatic modem recognition with adjustable decoder list - No loss of data during analyzing, modem recognition and protocol changes (first bit) - Parametrizable decoders (alphabet, encryption keys, framing parameters, etc.) - Extension with user-defined decoders based on Decoder Description Language pyDDL (with go2DECODE Professional) - Content metadata post processing (customizable) - Output: - Decoder result window, configurable format by XSLT - All results are continuously saved in database - Metadata and content (text, audio, graphic, binaries) - Post-processing results: sender ID, recipient ID, position, etc. - Alarming based on post-processing results - Various export functions
STANDARD AUTOMATION	- Mission and task planning for multi-channel processing - Triggers based on wideband signal detection: - Signal energy - Modulation type - Modem type - Filter: - Signal parameters - Frequencies (band, fixed frequency, frequency channels) - Blocked frequencies (band, fixed frequency, job-specific and system wide) - System location - Time - Tasks: - Type: Wideband signal search with live processing - Additional task types as option: AMT - Enhance processing capacity and speed with additional option: WMPC-16/32 - Alarming for signal detection in wideband

go2MONITOR STANDARD PRODUCT FEATURES

RESULTVIEWER	• Display, filter, edit and export from result database
	• Display of:
	  - Decoder output
	  - Demodulated audio files (CW, TETRA, etc.)
	  - Text output (ALE, HFDL, etc.)
	  - Binary and graphical files
	  - Audio demodulation and playback
	  - Recognized modems (protocols)
	  - Wide- / narrowband classification results
	  - Recorded wide- / narrowband IF-signals
	  - Result metadata like time, frequency, modulation, etc.
	• Functions:
	  - Advanced filter
	  - Filter data using GUI, SQL or scripting
	  - Sorting and grouping function
	  - Windows are implemented as docking /floating windows and can be freely positioned
	  - Table and graphical (time-frequency plane) result display
	  - Listen to audio, even from IF recordings
	  - Select, extract (DDC) and store emission from wideband recording as independent recording

INTEGRATION	• API for application control and streaming (full back-end integration possible) • Receiver control and integration framework (RCM) • VITA 49 and ExtIO • Generic PROCITEC/PLATH IF streaming interface • Several customization possibilities based on Python scripting for DF, content post-processing, data export, etc.

The performance of our software products depends on the hardware used. Technical parameters can differ under real operational conditions.
The parameters specified are limit values that cannot be guaranteed in all combinations. Specifications subject to change.

7

go2MONITOR OPTIONAL PRODUCT FEATURES

PMR DECODER	• Additional set of PMR/SAT decoders, see www.procitec.com/go2signals-decoderlist • May require export approval prior to supply
MIL DECODER	• Additional set of military demodulators and decoders, see www.procitec.com/go2signals-decoderlist • Requires export approval prior to supply
WIDEBAND INPUT CLASSIFICATION 10 OR 20 MHZ **(WCL-10/20)**	• Raise wideband input bandwidth • WCL-10: Coherent 10 MHz (1 MHz HF) • WCL-20: Coherent 20 MHz (2.4 MHz HF) • Recommended additional computing resources: WCL-10: 2-4 CPU cores and 8 GB RAM. WCL-20: 4-8 CPU cores and 16 GB RAM
WIDEBAND RECORDING 10 OR 20 MHZ **(WBR-10/20)**	• Raise wideband recording bandwidth • WBR-10: Lossless recording of 10 MHz (1 MHz HF) • WBR-20: Lossless recording of 20 MHz (2.4 MHz HF) • Requires WCL-10/20 • Recording scheduler and loop recording as additional option: AMT • Recommended additional computing resources: CPU: 1-2 CPU cores, HDD/SSD volume depends on total time of signal recording, HDD/SSD speed for WBR-10: 500 Mbit/s and WBR-20: 1 Gbit/s sustained write speed

ENHANCED AUTOMATION
 	
(AMT)
	• Additional Automation features:
	  - Continuous classification mode
	  - Task types:
	    - Wideband signal search with automatic narrowband channel processing
	    - Continuous fixed-frequency monitoring
	    - Wideband recording (time based or emission triggered)
	• Enhance processing capacity and speed with option: WMPC-16/32

WIDEBAND MULTI PRODUCTION 16 OR 32 CHANNELS **(WMPC-16/32)**	• Extends the number of channels with functionality channelizing (DDC), classification, analog demodulation and recording in steps of 16, 32 or more • Raises channel speed for digital demodulation and decoding faster than real-time (in average: 4-times faster) • Enhance processing capacity and speed for automatic processing with option: AMT • If in combination with WCL-10/20, recommended additional computing resources: WCL-10: 1-2 CPU cores and 4 GB RAM. WCL-20: 2-4 CPU cores and 8 GB RAM
NARROWBAND RECEIVER CONTROL 4 OR 8 CHANNELS **(NRC-4/8)**	• Receiver control for handoff receivers • Process signals parallel and independent from wideband input • Handoff signal production triggered by wideband scan receiver result as additional option combined with: AMT • NRC-4: enables up to 4 handoff receivers for go2MONITOR 1/2/4 • NRC-8: enables up to 8 handoff receivers for go2MONITOR 8

go2MONITOR OPTIONAL PRODUCT FEATURES

HOPPER DETECTION **(HOPD-20)**	• Recognition and recording of hopper signals in combination with AMT, WCL-20 and WBR-20 • Minimum signal duration: 2 seconds, at least 100 hops • Minimum signal bandwidth: 250 kHz • Hop rate: 5 to 50 hops/s for HF or 100 to 1.000 hops/s for V/UHF • Minimum hop bandwidth: 1 kHz • Recommended additional computing resources: 4-8 CPU cores and 16 GB RAM • Requires export approval prior to supply
REMOTE CONTROL API	• C++ library and API interface for system integration
RCM FRAMEWORK	• C++ framework for receiver integration

The performance of our software products depends on the hardware used. Technical parameters can differ under real operational conditions. The parameters specified are limit values that cannot be guaranteed in all combinations. Specifications subject to change.

9

go2signals

FEATURE COMPARISON TABLE go2MONITOR 1/2/4/8 vs. low-SWaP

FEATURE	go2MONITOR 1/2/4/8	go2MONITOR low-SWaP
Wideband classification	Instantaneous snapshot and continuous classification	Sequential snapshot classification
Wideband I/Q input bandwidth	5, 10, 20 MHz and higher on request	Depending on receiver and hardware resources
Wideband recording function	Yes	No
Rule based fixed frequency to channel allocation	Yes	Yes
Product option enhanced automatic monitoring and tasking (AMT)	Yes (dynamic)	No
Channel with fully automatic modem recognition, demodulation and decoding	Yes	No
Channel limited to demodulation of analog signals	No	Yes
Channel limited to demodulation and decoding of digital signals	No	Yes
Channel with signal buffer (decoding of the first bit)	Yes	No
All channels include recording function	Yes	Yes
Automatic alerting and notification ('cross-cue') to 3rd-party systems (eg. ISR/CEMA	Yes	Yes
Additional PMR and MIL decoder packages available	Yes	Yes
Product option multichannel production (WMPC)	Yes	No
Integration based on API	Yes	No
Includes support for receivers, classification, demodulation, decoding and decryption	Yes	Yes

The performance of our software products depends on the hardware used. Technical parameters can differ under real operational conditions. The parameters specified are limit values that cannot be guaranteed in all combinations. Specifications subject to change.

go2signals

go2MONITOR / SIGNAL CLASSIFICATION LIBRARY MODULATION CLASSIFIER*

Modulation	Spec. general	Spec. HF	Spec. V/UHF	Recognition quality (Eb/No) for a detection rate > 90% and false alarms < 1%
Max. signal bandwidth		50 kHz	50 - 300 kHz (depending on modulation type)	
Signal energy detection min. SNR		6 dB	6 dB	
Analogue modulation types		• USB J3E • LSB J3E • AM A3E • DSB-SC (optional)	• USB J3E • LSB J3E • AM A3E • NFM F3E (Radio frequency ≥ 25 MHz) • DSB-SC (optional)	
ASK 2/4			1.2 - 25 kBd Radiofrequency: ≥ 300 MHz	20 dB
FSK 2	m = 1 - 10	25 - 4800 Bd	1.2 - 25 kBd	11 - 15 dB
FSK 2	m = 0.75 - 1.5		25 - 75 kBd	≥ 25 dB
FSK 4	(shift > sr)	25 - 4800 Bd	1.2 - 25 kBd	14 - 16 dB
GMSK	m = 0.5	300 - 4800 Bd	1.2 - 125 kBd	14 - 16 dB
MCFSK2	m ≥ 1; 2 - 64 channels	40 - 250 Bd 120 - 1000 Hz channel spacing (min. 2x shift)	40 - 250 Bd 120 - 1000 Hz channel spacing (min. 2x shift)	17 dB
MORSE		30 - 250 CPM	30 - 250 CPM	
MSK	m = 0.5	100 - 4800 Bd	1.2 - 125 kBd	14 - 16 dB
Multitone FSKn	5 - 64 tones (shift > sr)	3 - 200 ms (5 - 330 Bd)	3 - 200 ms (5 - 330 Bd)	14 - 16 dB
OFDM	Tg/Tu: 0.125 - 1 25 - 512 channels	25 - 200 Bd 30 - 250 Hz channel spacing	25 - 200 Bd 30 - 250 Hz channel spacing	14 - 18 dB
OTH Radar		Detection only	FM-CW variants only	

* Measurement conditions: 4 seconds sample and correct segmentation of emission.
Shift is defined as frequency difference between neighboring tones.

go2signals

go2MONITOR / SIGNAL CLASSIFICATION LIBRARY MODULATION CLASSIFIER*

Modulation	Spec. general	Spec. HF	Spec. V/UHF	Recognition quality (Eb/No) for a detection rate > 90% and false alarms < 1%
Multichannel (D)PSK 2, 4 A/B	max. 10 kHz signal bandwidth; 2 - 64 channels	31.25 - 250 Bd 50 - 300 Hz channel spacing	31.25 - 250 Bd 50 - 300 Hz channel spacing	13 - 15 dB
(D)PSK 2 A/B		31.25 - 4800 Bd	1.2 - 125 kBd	7 - 10 dB, A/B Decision: 8 - 15 dB
(D)PSK 4 A/B		31.25 - 4800 Bd	1.2 - 125 kBd	8 - 12 dB, A/B Decision: 10 - 15 dB
(D)PSK 8 A/B		31.25 - 4800 Bd	1.2 - 125 kBd	HF: 8 - 12 dB, A/B Decision: 10 - 15 dB V/UHF: 10 - 14 dB, A/B Decision: 12 - 15 dB
OQPSK **			Within Freq. Ranges 1545-1551 MHz and 3600-3629 MHz 2400 Bd – 500 kBd	15dB
PSK 16		300 - 4800 Bd	1.2 - 125 kBd	14 - 16 dB
QAM	Order: 16, 32, 64 Rectangular constellations only	1600 - 4800Bd	1.6 - 25 kBd	22 dB
WFM (FM Broadcast only)			Radio frequency: 65 MHz - 108 MHz Bandwidth: 50 kHz - 300 kHz	

* Measurement conditions: 4 seconds sample and correct segmentation of emission.

Shift is defined as frequency difference between neighboring tones.

** Includes ML/AI technology

go2signals

go2MONITOR / SIGNAL CLASSIFICATION LIBRARY MODEM CLASSIFIER

HF	V/UHF
ALE 3G	ACARS-VHF
ALE 4G	APCO-25
CHN 4+4	APCO-25 Phase 2 Downlink
CHN hybrid	DAB
CIS-45 (33 / 45 Bd)	DECT
CIS-60	DMR
CIS-93	DMR Continuous
CIS-112	dPMR
CIS-128	D-STAR
CODAN 3212 16 Channel PSK	DVB-T (8 MHz Mode only)
CODAN 3012 16 Channel PSK	GSM (<3G), UMTS, LTE
HFDL	Inmarsat Satphone Uplink
LINK11 (CLEW)	Iridium Satphone Uplink
LINK 11 (SLEW)	MPT1327 1200Bd MSK
MIL-STD-188-110A Serial (singletone) mode (a.k.a. STANAG 4539)	NXDN 2400 Bd, 4800 Bd
MIL-STD-188-110B/C App. C (a.k.a. STANAG 4539 HDR)	TETRA Downlink
MIL-STD-188-110C App. D	TETRA Uplink
PACTOR (I, II, II FEC, III, 4)	TETRAPOL
STANAG 4285/4481 (PSK)	Thuraya Satphone Uplink
STANAG 4529	VDL-2
STANAG 4539	Yaesu System Fusion

The performance of our software products depends on the hardware used. Technical parameters can differ under real operational conditions. The parameters specified are limit values that cannot be guaranteed in all combinations. Specifications subject to change.

13

go2signals

go2MONITOR / SIGNAL CLASSIFICATION LIBRARY MEASURED MODULATION TYPE PARAMETERS

Parameters	Description	OFDM	CARRIER	FSK	MFSK (FSKn)	MSK	CW	PSK	MCPSK	QAM	ASK	MCFSK	Voice	FM Broadcast	Unknown
Modulation	The type of modulation and its quality	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Pitch	Pitch of the modulated voice												•		
Type	Type of voice like LSB, USB, AM, FM												•		
Symbol rate	The symbol rate in Bd	•		•	•	•		•	•	•	•	•			
Order	The number of phase shifts / levels							•	•		•				
Version	Version of PSK A or B							•	•						
CPM	Transmitted characterper minute						•								
Dash Dot Ratio	The ratio between the length of dashes and dots						•								
Shift	The measured shift			•	•	•						•			
Channel spacing	The measured distance between channel in Hz	•							•			•			
Frequency	The center frequency ofthe signal	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Bandwidth	The overall bandwidth of the signal	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SNR	The signal to noise ratioin dB	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Signal time	Time of measurement	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Number of tones				•	•										
Number of channels									•			•			

go2MONITOR DEMODULATORS

AM/A3E (Voice)	OFDM
Analogue Selcal	OQPSK
ASK 2 (OOK), 4, 8	Pactor II, III, 4
Chirp	PSK 2, 4, 8, 16 A/B
Clover II	PSK data aided
Clover 2000	QAMn 16, 32, 36, 64, 128, 144, 256
Clover 2500	QAMn var:
Coquelet	• APSK16_dvbs2
DPSK 2, 4, 8, 16 A/B	• ASK2PSK2 abs/diff
F1A	• ASK2PSK4 abs/diff
FM/F3E (Voice)	• ASK2PSK8 abs/diff
F7B/F7W	• ASK2PSK16 diff
FSK 2 matched	• QAM 8
FSK 2, 4, 8 disc.	• QAM 16 circle/square
FSK 2,3 auto shift	• QAM 16 v17 abs/diff
J3E (USB, LSB) (Voice)	• QAM 16 v22 abs/diff
LINK11*	• QAM 32 circle
MDPSK 2, 4, 8, 16 A/B	• QAM 64 circle/square
MCFSK 2	• QAM 256 square
Morse	
MPSK 2, 4, 8, 16 A/B	Robust Packet
MSK/GMSK	TFM 3, 5
MT63	THROB / THROBX
MultiModem	Wideband HF (MIL 110 App.D) *
MultiTone (FSKn)	

* requires optional product feature MIL decoder package

The performance of our software products depends on the hardware used. Technical parameters can differ under real operational conditions. The parameters specified are limit values that cannot be guaranteed in all combinations. Specifications subject to change.

15

go2signals

go2MONITOR Decryption*

Decoder / Encryption type	Detection	Recognize Type	Decryption
TETRA Downlink			
TEA 1,3,4	•		key entered
TEA 2, end-to-end	•		
TETRA Uplink			
TEA 1,2,3,4	•	•	
end-to-end	•	•	
TETRA DMO			
TEA 1,3,4	•	•	key entered
TEA 2, end-to-end	•	•	
DMR / DMR Continuous			
Motorola Basic	•	•	automatic / key entered
Alinco	•	•	automatic / key entered
Hytera Basic	•	•	automatic / key entered (not continuous)
Kenwood Basic	•	•	
Enhanced/ARC4	•	•	key entered
Advanced encryptions (DES/AES)	•	•	key entered
APCO-25, APCO-25 P2			
ACCORDION 1.3	•	•	
BATON(Auto Even)	•	•	
FIREFLY Type 1	•	•	
MAYFLY Type 1	•	•	
SAVILLE	•	•	
BATON(Auto Odd)	•	•	
DES-OFB	•	•	
2-key triple DES	•	•	
3-key triple DES	•	•	
AES	•	•	
NXDN			
Basic Encryption (scrambled)	•	•	automatic / key entered
DES 64	•	•	
AES 128	•	•	
DECT			
Encryption	•	•	
Tetrapol			
Encryption	•	•	

* requires optional product feature PMR decoder package

Decoder / Encryption type	Detection	Recognize Type	Decryption

go2signals

go2MONITOR SUPPORTED RECEIVERS

Receiver	Max. Rx bandwith*	Spectrum overview	Scan	Windows	Linux	Remark
AirSpy	8 MHz			•		Experimental support
CommsAudit CA7851	5 MHz			•	•	VITA 49
CommsAudit CA7852	20 MHz			•	•	VITA 49
Grintek GRX Lan	1 MHz			•		
IZT R3xxx series	20 MHz	•	•	•	•	Up to 3 channels + spectrum
IZT R4000 (SignalSuite)	1 MHz			•	•	1 channel
Microtelecom PERSEUS	800 kHz			•		Limited USB 3.0 compatibility
narda® NRA-3000 RX	320 kHz			•	•	
narda® NRA-6000 RX	320 kHz			•	•	
narda® IDA 2	320 kHz			•	•	
narda® SignalShark® 3310	20 MHz			•	•	VITA 49
PLATH SIR 2110	20 MHz			•	•	External receiver control
PLATH SIR 2115	4x20 MHz			•	•	External receiver control
PLATH SIR 5110	12 MHz			•	•	16x768 kHz subbands External receiver control
PLATH SIR 5115	Full HF			•	•	40x768 kHz subbands External receiver control
R&S EB 500	2 MHz	•	•	•	•	
R&S EB 510	5 MHz	•	•	•	•	
R&S EM100/PR100	500 kHz	•	•	•	•	
R&S ESMD	15 MHz	•	•	•	•	External receiver control

* Maximum bandwidth of the receiver. Maximum useable receiver input bandwidth in go2MONITOR depends on receivers streaming interface, hardware performance and go2MONITORs license configuration.

The performance of our software products depends on the hardware used. Technical parameters can differ under real operational conditions. The parameters specified are limit values that cannot be guaranteed in all combinations. Specifications subject to change.

17

go2MONITOR SUPPORTED RECEIVERS

	Max. Rx bandwith*	Spectrum overview	Scan	Windows	Linux	Remark
RFSPACE NetSDR	2 MHz			•	•	
RFSPACE SDR-14	190 kHz			•		
RTLSDR/Noxon USB-sticks	3.2 MHz			•		Experimental support. Con- tinuous signal up to 2.4 MHz
SDRplay RSP1 & RSP2	6 MHz			•		Experimental support
SignalHound BB60C	27 MHz	•	•	•	•	
SignalHound SM200 A/B	20 MHz	•	•	•	•	
ThinkRF R5500-408	6.25 MHz			•	•	VITA 49
ThinkRF R5500-427	6.25 MHz			•	•	VITA 49
ThinkRF WSA5000-408	780 kHz			•	•	VITA 49
ThinkRF WSA5000-427	780 kHz			•	•	VITA 49
USRP X310	20 MHz			•	•	
WiNRADiO G31DDC	800 kHz			•		
WiNRADiO G33DDC	4 MHz	•		•		
WiNRADiO G35DDC	4 MHz	•		•		
WiNRADiO G39DDC	4 MHz	•		•		Up to 2 channels
Generic VITA 49 receiver support	Max. receiver bandwidth	•		•	•	Can be configured in a wide range for different receiver types
Other generic „Winrad ExtIO" supported receivers	Max. receiver bandwidth			•		

* Maximum bandwidth of the receiver. Maximum useable receiver input bandwidth in go2MONITOR depends on receivers streaming interface, hardware performance and go2MONITORs license configuration.

PROCITEC®

HOUSE OF SIGNALS