PROCITEC®
HOUSE OF SIGNALS

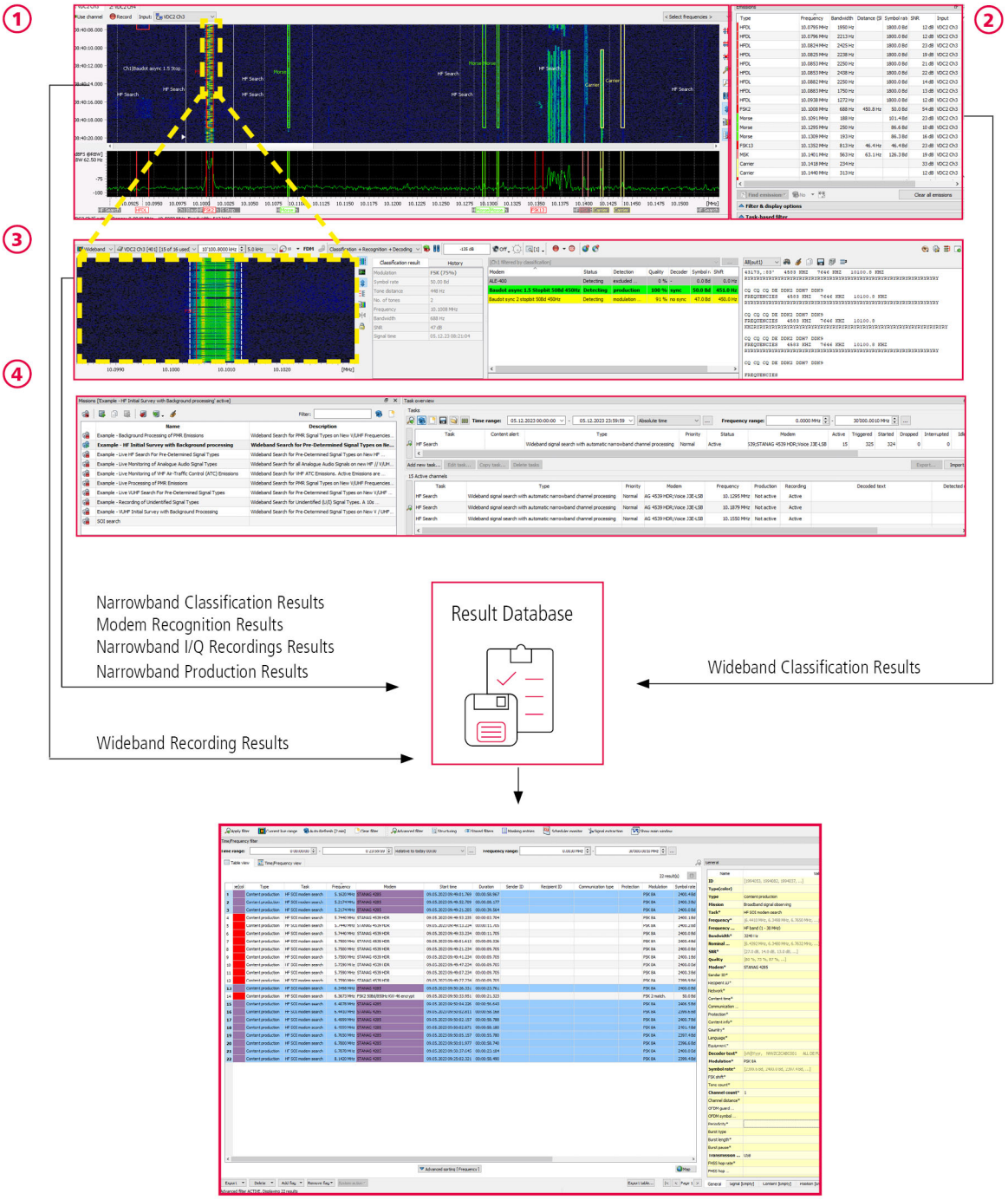
Technical Specifications

Monitoring Suite

Product Version v26.2

July, 2026

GO2MONITOR OVERVIEW



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 later in this brochure
go2MONITOR LOW-SWAP	• 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

go2MONITOR OPERATOR	Additional client for processing radio signals and viewing the results stored in the central system
	• Enables multiple operators to access a central go2MONITOR system simultaneously and work independently
	• Shared network-based access to the processing resources of a central go2MONITOR system
	• Independent use of available narrowband channels and handoff receivers for manual signal processing
	• Access to centrally managed wideband signal inputs
	• Real-time monitoring of active system channels
	• Efficient collaboration between operators, including:
	  - Sending alerts and notifications
	  - Monitoring channels assigned to other operators
	  - Handing over channels and tasks between operators
	• Full functionality of go2MONITOR Result, including:
	  - Shared access to a central results database
	  - Viewing, editing, and managing all stored results
	  - Parallel work on results while the central system continues processing signals
	  - Audio playback, including IF recordings
	  - Flexible filtering, grouping, visualization, and export of results
	  - Switching between databases
	• 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	Additional workstation client for accessing, analyzing, and managing results stored in a central go2MONITOR system • Enables multiple users to access and work with the result data of a central go2MONITOR system simultaneously and independently • Shared access to a central results database • Viewing, editing, and managing all stored results • Parallel operation with ongoing signal processing and continuous result generation in the central system • Audio playback, including signals from IF recordings • Flexible result visualization with filtering, grouping, graphical views, table views, and data export functions • Switching between multiple systems and their result databases • Installation on additional workstations with network-based access to the central system • Recommended computing resources: client workstation/notebook with access to the central system via network and Full HD screen

go2MONITOR PRODUCT CONFIGURATIONS	
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; RF64) • 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

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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
	• Light and dark color theme
	• 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. 2 Cores and 3 GB RAM • Per demodulation and decoding channel additional 1 CPU core and 2 GB RAM • Per 1 MHz max. wideband input bandwidth additional 1.2 GB RAM • Per started 10 MHz max. wideband input bandwidth additional 1 CPU core • 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 with Media Feature Pack - Windows Server 2019/2022/2025 - Red Hat Enterprise Linux RHEL 8 (8.8 or higher, 8.10 recommended) - Red Hat Enterprise Linux RHEL 9 (9.2 or higher, 9.2 recommended) - Ubuntu 22.04 LTS (22.04.2 or higher, 22.04.2 recommended) - Ubuntu 24.04 LTS
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.

go2MONITOR STANDARD PRODUCT FEATURES	
RECEIVER CONTROL	• Generic receiver control (frequency, bandwidth, gain, etc.) • Step and scan mode • PSD receiver overview display • Parallel use of receivers from different vendors possible • Many receivers supported natively, see: list of supported receivers • Handoff receiver input as additional option: NRC-4/8
WIDEBAND INPUT, CLASSIFICATION AND RECORDING	• Data Acquisition: - Digital IF (complex I/Q, VITA49) via stream or receiver - Digital IF/AF recordings (real / complex WAV 8, 16, 32 Bit; RF64, TCI cap, Medav DAT, Custom RAW, Midas BLUE, SigMF and SignalHound IQ file format) - 2 wideband inputs in parallel • Input bandwidth: - Depending on used receiver and hardware resources, limited to 200 MHz • Wideband classifier bandwidth: - Coherent 1 kHz up to 5 MHz (1 MHz HF) - Up to 20 MHz (2.5 MHz HF) as additional option: WCL-10/20 • 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 as additional option: WBR-10/20 • 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, VITA49) via stream - Digital IF/AF recordings (real / complex WAV 8, 16, 32 Bit; RF64, TCI cap, Medav DAT, Custom RAW, Midas BLUE, SigMF and SignalHound IQ file format) - Handoff receiver input as additional option: NRC-4/8 • Input bandwidth: 2 kHz - 4 MHz • Additional functions: - Live audio listening (analog and digital voice) - Analog Audio buffering (default 30 min) with playback from position, in loop, noise skip and changed speed - 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 - Fully automatic (classification, modem recognition, decoding) - Analog audio only in product configuration: go2MONITOR low-SWaP

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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 and MIL decoder packages as additional option • Latest decoder list: www.procitec.com/go2signals-decoderlist • Special decoder functions: - Multiple data output (text, audio/voice, files, raw, …) - Automatic modem recognition with adjustable decoder list - No loss of data during analyzing, modem recognition and protocol changes (first bit) - Decryption functions (automatic key detection, manual key input) - Parametrizable decoders (alphabet, encryption keys, framing parameters, etc.) - Extendable with user-defined decoders based on Decoder Description Language pyDDL (with go2modem-studio) - 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 • Bulk File Processing - Observe a list of directories for new recordings and process them • Speech-To-Text (STT) interface to Whisper (OpenAI) - Transcript audio to text for many different languages - Translate to English - Different language models available - Quality and functionality are defined by Whisper software

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. • Integrated map: - Display decoded signal position if position is transmitted (e.g. HFDL) - Display line of bearing if direction finding is connected - Display position if location system is connected - Maps from local file data (in go2MONITOR included maps) - Maps from local ESRI/ArcGIS servers - Maps from global map servers over https (OpenStreetMap and ArcGIS servers) • Functions: - Advanced filter - Filter data using GUI, SQL or scripting - Sorting and grouping function - Mark cells in table using user-defined rules - Manual correction of results (with bulk editing mode) - Windows are implemented as docking windows and can be freely positioned - Table and graphical (time-frequency plane) result display - Timeline view for temporal behavior and relationship analysis - Communication network view showing relations and traffic intensity between participants - Listen to audio, even from IF recordings (includes demodulation) - 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, SoapySDR and ExtIO • Generic PROCITEC/PLATH IF streaming interface • Several customization possibilities based on Python scripting for DF, content post-processing, data export, etc.

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go2MONITOR OPTIONAL PRODUCT FEATURES	
PMR DECODERS	• Additional set of PMR decoders, see www.procitec.com/go2signals-decoderlist • May require export approval prior to supply
MIL DECODERS	• 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)**	• Increase wideband classifier bandwidth • WCL-10: Coherent up to 10 MHz (1 MHz HF) • WCL-20: Coherent up to 20 MHz (2.5 MHz HF) • Multiple options can be combined for higher bandwidths • Recommended additional computing resources: WCL-10: 2-4 CPU cores. WCL-20: 4-8 CPU cores
WIDEBAND RECORDING 10 OR 20 MHZ **(WBR-10/20)**	• Increase wideband recording bandwidth • WBR-10: Lossless recording of up to 10 MHz • WBR-20: Lossless recording of up to 20 MHz • Multiple options can be combined for higher bandwidths • 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: o Wideband signal search with automatic narrowband channel processing o Continuous fixed-frequency monitoring o 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 (on 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 (in addition to standard and WMPC-16/32 recommendations): WMPC-16: 1-2 CPU cores and 4 GB RAM. WMPC-32: 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)	• Recognition and recording of hopper signals in combination with AMT (use option WBR-20 to enlarge recording bandwidth) • 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 for 20 MHz max input bandwidth: 4-8 CPU cores and 24 GB RAM • Requires export approval prior to supply
32 ANALOG AUDIO CHANNELS (AUDIO-32)	• 32 additional audio channels for manual monitoring of audio signals • Each audio channel can demodulate on one frequency LSB, USB, AM, FM or WFM with squelch function • Audio buffering (default 30 min) with playback from position, in loop, noise skip and changed speed • Demodulated audio can be automatically recorded and saved in the results database • Automatic channel assignment, based on classification result (requires option AMT)
DIRECTION FINDING (DF)	• Add additional functions for querying and displaying measured values from direction finder hardware received via an external interface • Adaptable scripting interface for connecting a wide range of direction finders with scripting function available • Integrated support for Signalgenerix RFHunter and NARDA SignalShark • Read out and save measured results from the direction finders (azimuth, elevation, time, frequency, bandwidth, etc.) • Start a bearing in production channel for manually selected signals • Create position fixes from manually selected lines of bearing • Automatic start of a bearing when certain signals are detected (AMT option required) • Restrict signal processing to an area of interest (AMT option required) • Display the lines of bearing on the map
REMOTE CONTROL API	• API for system control and monitoring - C++ library - Python framework
RCM FRAMEWORK	• C++ framework for receiver integration

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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	Depending on receiver and hardware resources	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 (e.g. ISR/CEMA assets)	Yes	Yes
Additional PMR and MIL decoder packages available	Yes	Yes
Product option multi-channel production (WMPC)	Yes	No
Integration based on API	Yes	No
Includes support for receivers, classification, demodulation, decoding and decryption	Yes	Yes

go2MONITOR / SIGNAL CLASSIFICATION LIBRARY MODULATION CLASSIFIER*

Modulation	Spec. general	Spec. HF	Spec. V/U/SHF	Recognition quality (Eb/No) for a detection rate > 90% and false alarms < 1%
Max. signal bandwidth		50 kHz	50 kHz – 80% of input bandwidth	
Signal energy detection min.		6 dB	6 dB	
Analog modulated voice detection (no SELCALS)		- USB J3E - LSB J3E - AM A3E - DSB-SC	- USB J3E - LSB J3E - AM A3E - NFM F3E (Radio frequency ≥ 25 MHz) - DSB-SC	
ASK 2/4			100 Bd – 50 kBd	14 – 18 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**	8 – 64 tones (shift > sr)	3 – 200 ms (5 – 330 Bd)	3 – 200 ms (5 – 330 Bd)	14 – 16 dB
OFDM		**Bandwidth ≤ 50 kHz** - 25 – 512 Channels - Tg/Tu 0.125 – 1 - Max. channel spacing 250 Hz - Min. 25 Bd (Tested with PSK8 channel modulation)	**Bandwidth ≤ 50 kHz** - See Spec. HF **Bandwidth > 50 kHz -12.5 MHz** - 128 – 32768 Channels - Tg/Tu 0.0625 – 0.25 - Max. channel spacing 15 kHz - Min. 50 Bd (Tested with PSK8 channel modulation)	14 – 18 dB

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* Measurement conditions: Typically, 4 seconds sample and correct segmentation of emission. Signal bandwidth is not more than 80% of the input bandwidth.
Shift is defined as frequency difference between neighboring tones.

go2MONITOR / SIGNAL CLASSIFICATION LIBRARY MODULATION CLASSIFIER*

Modulation	Spec. general	Spec. HF	Spec. V/U/SHF	Recognition quality (Eb/No) for a detection rate > 90% and false alarms < 1%
OTH Radar	FM-CW variants only	Detection only		
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 kBd – 50 MBd	7 – 10 dB, A/B Decision: 8 – 15 dB
(D)PSK 4 A/B		31.25 – 4800 Bd	1.2 kBd – 50 MBd	8 – 12 dB, A/B Decision: 10 – 15 dB
(D)PSK 8 A/B		31.25 – 4800 Bd	1.2 kBd – 50 MBd	HF: 8 – 12 dB, A/B Decision: 10 – 15 dB V/UHF: 10 – 14 dB, A/B Decision: 12 – 15 dB
OQPSK **			100 Bd – 50 MBd	10 dB
PSK 16		300 – 4800 Bd	1.2 kBd – 50 MBd	14 – 16 dB
QAM	Order: 8, 16, 32, 64 Selected constellations	100 – 4800Bd (Constellation dependent, at least 50 symbols per constellation point within classification interval)	100 Bd – 12.5 MBd (Constellation dependent, at least 50 symbols per constellation point within classification interval)	Constellation dependent 12 – 20 dB
FM-PSK	After FM-demodulation PSK is searched in 300 – 3400 Hz band		100 – 2400 Bd	
WFM (FM Broadcast only)			Radio frequency: 65 MHz – 108 MHz Bandwidth: 50 kHz – 300 kHz	

* Measurement conditions: Typically, 4 seconds sample and correct segmentation of emission. Signal bandwidth is not more than 80% of the input bandwidth.
Shift is defined as frequency difference between neighboring tones.

** Includes ML/AI technology

go2MONITOR / SIGNAL CLASSIFICATION LIBRARY MODEM CLASSIFIER

HF	V/U/SHF
ALE 3G	ACARS-VHF
ALE 4G	APCO-25
CHN 4+4	APCO-25 Phase 2 Downlink
CHN MIL Hybrid 8FSK-PSK	DAB
CIS Akula 500Bd/1000Hz	DECT
CIS-45 OFDM (33Bd and 45 Bd)	DMR
CIS-60 OFDM (30Bd and 35.55Bd)	DMR Continuous
CIS-93 OFDM	dPMR
CIS-112 OFDM	D-STAR
CIS-128 OFDM 3kHz	DVB-T (8 MHz Mode only)
CODAN 3212 16 Channel PSK (includes CODAN 3012 variant)	Flex
HFDL	GSM (<3G), UMTS, LTE
LINK 11 (CLEW and SLEW)	INMARSAT IsatPhone Uplink
LINK 22	Iridium Uplink
MIL-STD-188-110A Serial (single tone) mode (a.k.a. STANAG 4539)	MPT1327
MIL-STD-188-110B/C App. C (a.k.a. STANAG 4539 HDR)	NXDN (2400 Bd and 4800 Bd)
MIL-STD-188-110C App. D	TETRA Downlink
PACTOR (I, II, II FEC, III, 4)	TETRA Uplink
STANAG 4285/4481 (PSK)	Tetrapol
STANAG 4529	Thuraya Uplink
STANAG 4539	VDL-2
	Yaesu System Fusion (including NB variant)

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go2MONITOR / SIGNAL CLASSIFICATION LIBRARY MEASURED MODULATION TYPE PARAMETERS

Parameters	Description	OFDM	CARRIER	FSK	MFSK (FSKn)	MSK	CW	PSK	MCPSK	QAM	FM-PSK	ASK	MCFSK	Voice	FM Broadcast	Unknown
Modulation	Type of modulation and its quality	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Pitch	Pitch of the modulated voice													•		
Type	Type of voice like LSB, USB, AM, FM													•		
Symbol rate	Symbol rate in Bd	•		•	•	•		•	•	•	•	•	•			
Order	Number of phaseshifts / levels							•	•		•	•				
Version	Version of PSK A or B							•	•		•					
CPM	Transmitted character per minute						•									
Dash Dot Ratio	Ratio between the length of dashes and dots						•									
Shift	Measured shift			•	•	•							•			
Channel spacing	Measured distance between channel in Hz	•							•				•			
Frequency	Center frequency ofthe signal	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Sub-carrier center frequency										•					
Bandwidth	Overall bandwidth of the signal	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Sub-carrier bandwidth										•					
SNR	Signal to noise ratioin dB	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Signal time	Time of measurement	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

* A field that contains up to three detected QAM constellation details based on the soft decision result. Each comprises its corresponding constellation name, constellation ID, and detection quality. Optionally, it can also provide the respective constellation XML tags.

go2MONITOR / SIGNAL CLASSIFICATION LIBRARY MEASURED MODULATION TYPE PARAMETERS

Parameters	Description	OFDM	CARRIER	FSK	MFSK (FSKn)	MSK	CW	PSK	MCPSK	QAM	FM-PSK	ASK	MCFSK	Voice	FM Broadcast	Unknown
Number of tones				•	•											
Number of channels									•				•			
Constellation info										•*						

* A field that contains up to three detected QAM constellation details based on the soft decision result. Each comprises its corresponding constellation name, constellation ID, and detection quality. Optionally, it can also provide the respective constellation XML tags.

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go2MONITOR DEMODULATORS

ALE 3G*/4G*	MT63
AM/A3E (Voice)	OFDM
Analog 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	QAM: - QAM 16, 32, 36, 64, 128, 144, 256 (square) - QAM 16, 32, 64 (circle) - APSK16_dvbs2 - ASK2PSK2 abs/diff - ASK2PSK4 abs/diff - ASK4PSK16 diff - QAM 8 - QAM 16 v17 abs/diff - QAM 16 v22 abs/diff
Clover 2500	
Coquelet	
DECT**	
DPSK 2, 4, 8, 16 A/B	
DRM	
F1A	
FAX	
FM/F3E (Voice)	
F7B/F7W	Robust Packet
FreeDV	Serdolik System v2
FSK 2 matched	STANAG 4415*
FSK 2, 4, 8 disc.	TFM 3, 5
FSK (automatic mode selection)	THROB / THROBX
GSM**	Wideband HF (MIL 110 App.D) *
Hybrid	
J3E (USB, LSB) (Voice)	
LINK11*	
LoRa	
MDPSK 2, 4, 8, 16 A/B	
MCFSK 2	
Mil39Tone*	
Morse (A1A, A2A, F1A, F2A)	
MPSK 2, 4, 8, 16 A/B	
MSK/GMSK	

Modem specialized demodulators are only useable in combination with its corresponding decoders
* requires optional product feature MIL decoder package
** requires optional product feature PMR decoder package

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
Kenwood Basic	•	•	automatic / key entered
Enhanced/ARC4	•	•	key entered automatic key finding with go2key (optional)
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	•	•	key entered (only APCO-25)
2-key triple DES	•	•	key entered (only APCO-25)
3-key triple DES	•	•	key entered (only APCO-25)
AES	•	•	key entered (only APCO-25)
DES-XL	•	•	
ADP/RC4	•	•	key entered (only APCO-25)
NXDN			
Basic Encryption (scrambled)	•	•	automatic / key entered
DES 64	•	•	
AES 128	•	•	
DECT			
Encryption	•	•	
Tetrapol			
Encryption	•	•	

* requires optional product feature PMR decoder package

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go2MONITOR SUPPORTED RECEIVERS*

Receiver	Max. Rx bandwidth	Spectrum overview	Scan	Windows	Linux	Remark
Aaronia SPECTRAN V6 PLUS	102 MHz			•	•	Support over Aaronia RTSA-Suite PRO software
Aaronia SPECTRAN V6 ECO	49 MHz			•	•	Support over Aaronia RTSA-Suite PRO software
AirSpy	8 MHz			•		Experimental support
CommsAudit CA7851	5 MHz			•	•	VITA 49, No receiver control, only VITA-49 wideband signal
CommsAudit CA7852	20 MHz			•	•	VITA 49
CRFS RFeye Node 40-8	12.5 MHz	•	•	•	•	
Grintek GRX Lan	1 MHz			•		
EPIQ NDR364	125 MHz			•	•	
IZT R3xxx series	20 MHz	•	•	•	•	Up to 3 channels + spectrum
IZT R4000 (SignalSuite)	1 MHz			•	•	1 channel
IZT R5010	120 MHz	•	•	•	•	
IZT R5020	30 MHz			•	•	12 independent channels
IZT R5040	120 MHz	•	•	•	•	
IZT R5060 / R5071	60 MHz	•	•	•	•	
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	•		•	•	
PLATH SIR 2115	4x20 MHz			•	•	External receiver control. Fully functional driver available from the receiver manufacturer

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go2MONITOR SUPPORTED RECEIVERS*

	Max. Rx bandwidth	Spectrum overview	Scan	Windows	Linux	Remark
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 EM200	2 / 40 MHz	•	•	•	•	40 MHz bandwidth only if using 10G Ethernet interface
R&S ESMD	15 MHz	•	•	•	•	
R&S ESME	80 MHz	•	•	•	•	80 MHz bandwidth only if using 10G Ethernet interface
R&S ESMW	20 MHz	•	•	•	•	
R&S EB 510	5 MHz	•	•	•	•	
R&S EM100/PR100	500 kHz	•	•	•	•	
R&S EM200	2 / 40 MHz	•	•	•	•	40 MHz bandwidth only if using 10G Ethernet interface
RFSPACE NetSDR	1.6 MHz			•	•	
RTLSDR/Noxon USB-sticks	2.56 MHz			•		Experimental support. Continuous signal up to 2.4 MHz
SDRplay RSP1 & RSP2	6 MHz			•		Experimental support
SignalHound BB60C/D	27 MHz	•	•	•	•	
SignalHound SM200 A/B	20 MHz	•	•	•	•	
SignalHound SM200 C	165 MHz	•	•	•	•	

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go2MONITOR SUPPORTED RECEIVERS*

	Max. Rx bandwidth	Spectrum overview	Scan	Windows	Linux	Remark
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			•	•	Support upon request only
WiNRADiO G31DDC	800 kHz			•		
WiNRADiO G33DDC	4 MHz	•		•		
WiNRADiO G35DDC	4 MHz	•		•		
WiNRADiO G39DDC	4 MHz	•		•		Up to 2 channels
WiNRADiO G69DDC	32 MHz (USB) 16 MHz (LAN)			•	•	
Generic VITA 49 receiver support	Max. receiver bandwidth	•		•	•	Can be configured in a wide range for different receiver types
Generic SoapySDR support	Max. receiver bandwidth			•	•	
Other generic „Winrad ExtIO" supported receivers	Max. receiver bandwidth			•		

* Performance and availability may be limited by receiver options, streaming interface, operating system and PC hardware.

go2MONITOR Decoders

You can find the list of available decoders on the following pages

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