W51PC & W61PC/LAN and Classifier Specification

List of Transmission Codes		CL	W51PC	W61
Version		6.5	6.4	6.5
1.	ACARS		+	+
2.	AIS	+	+	+
3.	ALF-RDS	+	+	+
4.	ALIS	+/-	+	+
5.	ALIS-2	-	+	+
6.	AMSAT-P3-D		+	+
7.	ARQ6-90	+	+	+
8.	ARQ6-98	-	+	+
9.	ARQ-E	+	+	+
10.	ARQ-E3	+	+	+
11.	ARQ-M2-242	+	+	+
12.	ARQ-M2-342	+	+	+
13.	ARQ-M4-242	+	+	+
14.	ARQ-M4-342	+	+	+
15.	ARQ-N	+	+	+
16.	ASCII	+	+	+
17.	ATIS (Selcal Digital)	+	+	+
18.	AUM-13	-	+	+
19.	AUTOSPEC	+	+	+
20.	BAUDOT	+	+	+
21.	BR6028	-	+	+
22.	BULG-ASCII	+	+	+
23.	CCIR-1 (Selcal Analog)		+	+
24.	CCIR-7 (Selcal Analog)		+	+
25.	CCITT (Selcal Analog)		+	+
26.	CIS-11	+	+	+
27.	CIS-12 (HEX output)	+/-	N/A	Prof.
28.	CIS-14	+	+	+
29.	CIS-36	-	+	+
30.	CIS-36-50	+	+	+
31.	CIS-50-50	+	+	+
32.	CLOVER-II (ARQ)	+/-	CV2-Option	CV2-Option
33.	CLOVER-2000 (ARQ)	+/-	CV2K-Option	CV2K-Option
34.	CODAN	+	+	+
35.	CODAN9001	+/-	C9001-Option 6.5	C9001-Option
36.	COQUELET-13	+/-	+	+
37.	COQUELET-8	+/-	+	+
38.	COQUELET-80	+/-	+	+
39.	CTCSS (Selcal Analog)		+	+
40.	CV-786	+	6.5	+
41.	CW-MORSE	+	+	+
42.	DCS SELCAL	+	+	+
43.	DGPS	+	+	+
44.	DTMF (Selcal Analog)		+	+
45.	DUP-ARQ	+	+	+
46.	DUP-ARQ-2	+	+	+
47.	DUP-FEC-2	+	+	+
48.	EEA (Selcal Analog)		+	+
49.	EFR	+	+	+
50.	EIA (Selcal Analog)		+	+
51.	ERMES		+	+
52.	EURO (Selcal Analog)		+	+
53.	FEC-A	+	+	+
54.	FELDHELL	-	+	+
55.	FLEX		+	+
56.	FM-HELL	-	+	+
57.	FMS-BOS (Selcal Digital)		+	+
58.	GMDSS/DSC-HF	+	+	+
59.	GMDSS/DSC-VHF/UHF		+	+
60.	GOLAY		+	+
61.	G-TOR	+	+	+
62.	G-TOR with different code table	+	+	+
63.	GW-FSK	+	Prof.	Prof.

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Version		6.5	6.4	6.5
64.	GW-PSK	+	Prof.	Prof.
65.	HC-ARQ	+	+	+
66.	HF-ACARS (HFDL)	-	+	+
67.	HNG-FEC	+	+	+
68.	ICAO-SELCAL (ANNEX 10)		+	+
69.	INMARSAT™ (see SAT-A/B/C/M/mM)			
70.	MD-674 (2 FSK async protocol, no in band diversity)	+	V6.5	+
71.	METEOSAT		+	+
72.	MFSK-16	+/-	+	+
73.	MFSK-20	-	+	+
74.	MFSK-8	+/-	+	+
75.	MIL-188-110A, Serial Tones, 75-4800 bps	+	+	+
76.	MIL-188-110-16TONE (HEX output)	+/-	N/A	Prof.
77.	MIL-188-110B, 3200-12800 bps	-	Prof.	Prof.
78.	MIL-188-110-39TONE	-	Prof.	Prof.
79.	MIL-188-141A (ALE)	+	+	+
80.	MIL-188-141B (BW0, BW1 BW4 data, BW2 & BW3 identification only)		Prof.	Prof.
81.	MIL-M-55529 NB/WB	+	V6.5	+
82.	MOBITEX-1200		V6.5	+
83.	MOBITEX-8000		V6.6	V6.6
84.	MPT-1327		+	+
85.	NATEL (Selcal Analog)		+	+
86.	NMT-450	+	+	+
87.	NOAA-GEOSAT		+	+
88.	PACKET-1200	+/-	+	+
89.	PACKET-300/600	+	+	+
90.	PACKET-9600		+	+
91.	PACTOR (all CRC's)	+	+	+
92.	PACTOR-FEC (all CRC's)	+	V6.5	+
93.	PACTOR-II (all CRC's)	+/-	+	+
94.	PACTOR-II-FEC (all CRC's)	+	Prof.	Prof.
95.	PACTOR-III (all CRC's)	+/-	Pac3-Option	Pac3-Option
96.	PICCOLO-MK12	+/-	+	+
97.	PICCOLO-MK6	+/-	+	+
98.	POCSAG		+	+
99.	POL-ARQ	+	+	+
100.	PRESS-FAX		+	+
101.	PSK-AM	+/-	+	+
102.	PSK-10	-	+	+
103.	PSK-125F	+	+	+
104.	PSK-31	+	+	+
105.	PSK-31-FEC	+	V6.5	+
106.	PSK-63F	+	+	+
107.	PSK-220F	+	+	+
108.	RUM-FEC	+	+	+
109.	SAT-AERO		N/A	Ask
110.	SAT-A-TELEX		Prof.	SAT-Option
111.	SAT-B-F (Inmarsat™, forward, TELEX)		N/A	SAT-Option
112.	SAT-B-F (Inmarsat™, forward, FAX)		N/A	SAT-Option
113.	SAT-B-F (Inmarsat™, forward, DATA)		N/A	SAT-Option
114.	SAT-B-F (Inmarsat™, forward, VOICE)		N/A	SAT-Option
115.	SAT-C-TDMA (Inmarsat™)		Prof.	SAT-Option
116.	SAT-C-TDM (Inmarsat™)		Prof.	SAT-Option
117.	SAT-C-EGC (Inmarsat™, Enhanced Group Calls, SafetyNET, FleetNET)		Prof. 6.5	SAT-Option
118.	SAT-M-F (Inmarsat™, forward, DATA)		Prof.	SAT-Option
119.	SAT-M-F (Inmarsat™, forward, FAX)		Prof.	SAT-Option
120.	SAT-M-F (Inmarsat™, forward, VOICE with IMBE codec)		Prof V6.5	V6.5
121.	SAT-mM-F(Inmarsat™, forward, DATA)		Prof.	SAT-Option
122.	SAT-mM-F(Inmarsat™, forward, FAX)		Prof.	SAT-Option
123.	SAT-mM (Inmarsat™,VOICE)		Ask	Ask
124.	SAT-M/mM-R (Inmarsat™, return, DATA, FAX, VOICE)		Ask	Ask
125.	SENAO		N/A	Ask
126.	SI-ARQ	+	+	+
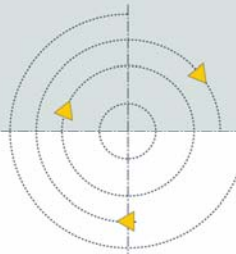
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Version		6.5	6.4	6.5
127.	SI-AUTO	+	+	+
128.	SI-FEC	+	+	+
129.	SITOR-ARQ	+	+	+
130.	SITOR-AUTO	+	+	+
131.	SITOR-FEC	+	+	+
132.	SKYPER (POCSAG)		+	+
133.	SP-14	-	Prof.	Prof.
134.	SPREAD-11	+	+	+
135.	SPREAD-21	+	+	+
136.	SPREAD-51	+	+	+
137.	SSTV Automatic		+	+
138.	SSTV Martin 1 & 3		+	+
139.	SSTV Martin 2 & 4		+	+
140.	SSTV Robot 12s		+	+
141.	SSTV Robot 24s		+	+
142.	SSTV Robot 36s		+	+
143.	SSTV Robot 8s		+	+
144.	SSTV SC-1 16 & 32s		+	+
145.	SSTV SC-1 8s		+	+
146.	SSTV Scottie 1 & 3		+	+
147.	SSTV Scottie 2 & 4		+	+
148.	SSTV Wraase SC-1 24 & 48s		+	+
149.	SSTV Wraase SC-1 48 & 96s		+	+
150.	SSTV Wraase SC-2 120s		+	+
151.	SSTV Wraase SC-2 180s		+	+
152.	SSTV Wraase SC-2 30 & 60s		+	+
153.	STANAG 4285 75-3600 bps	+	+	+
154.	STANAG 4415 75 bps (NATO ROBUST)	-	Prof.	Prof.
155.	STANAG 4481-PSK	-	+	+
156.	STANAG 4481-FSK (KG-84)	+	V.6.5	+
157.	STANAG 4529 75-1800 bps	-	+	+
158.	STANAG 4539 3200-12800 bps	-	Prof.	Prof.
159.	SWED-ARQ	+	+	+
160.	TWINPLEX ARQ	-	+	+
161.	VDEW (Selcal Analog)		+	+
162.	VISEL		+	+
163.	WEATHER-FAX	-	+	+
164.	ZVEI-1 (Selcal Analog)		+	+
165.	ZVEI-2 (Selcal Analog)		+	+
166.	ZVEI-VDEW (Selcal Digital)		+	+

Alphabets	W51	W61
Arabic Morse	+	+
ARQ1A, 7 bit	+	+
Baghdad70 Arabic, 5 bit	+	+
Baghdad80 Arabic, 5 bit	+	+
Bauer, 10 bit	+	+
Cyrillic Morse	+	+
Greek Morse	+	+
Hebrew Morse	+	+
HNG-FEC, 15 bit	+	+
ITA-1 Latin, 5 bit	+	+
ITA-2 Cyrillic, 5 bit	+	+
ITA-2 Danish-Norwegian, 5 bit	+	+
ITA-2 Hebrew, 5 bit	+	+
ITA-2 Latin Transparent, 5 bit	+	+
ITA-2 Latin, 5 bit	+	+
ITA-2 Swedish, 5 bit	+	+
ITA-5 Bulgarian, 7 bit ASCII	+	+
ITA-5 Chinese, 7 bit ASCII	+	+
ITA-5 Danish-Norwegian, 7 bit ASCII	+	+
ITA-5 French, 7 bit ASCII	+	+
ITA-5 German, 7 bit ASCII	+	+

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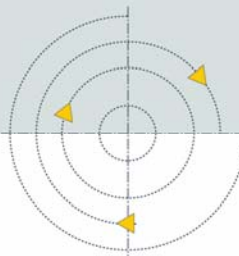
ITA-5 Swedish, 7 bit ASCII	+	+
ITA-5 US, 7 bit ASCII	+	+
Latin Morse	+	+
Scandinavian Morse	+	+
Spanish Morse	+	+
RUM-FEC, 16 bit	+	+
SITOR, 7 bit	+	+
TASS Cyrillic, 5 bit	+	+
Third Shift Cyrillic, 5 bit	+	+
Third Shift Greek, 5 bit	+	+
WAVECOM UNICODE Font	+	+

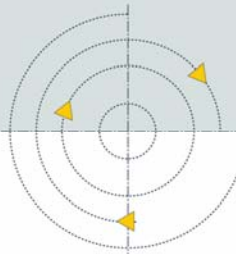| Demodulators	W51	W61
Additional software AM/ FM Demodulator for IF Inputs	+	+
Additional Pass-band Filters in most Modes	+	+
Demodulator AM, for METESAT and NOAA-GEOASAT FAX transmissions	+	+
Demodulator bit error rate within 3 dB of theory (white Gaussian noise, non fading channel)	+	+
Demodulator BPSK, 10-12000 symbols/s	+	+
Demodulator BR6028 Modem, 7 FDM channels S 85 Hz, Pilot-Tone 561Hz	+	+
Demodulator CTCSS	+	+
Demodulator CW Morse, 10-500 WPM, Center freq. 0.5 kHz-3.5 kHz, BW 100Hz-1.2 kHz	+	+
Demodulator DPSK, DBPSK, DQPSK, D8PSK, D16PSK, 10-12000 symbols/s	N/A	+
Demodulator DPSK, DBPSK, DQPSK, D8PSK, D16PSK, 10-2400 symbols/s	+	+
Demodulator DTMF	+	+
Demodulator DXPSK, dual carrier adaptive modulation, 2DPSK-D16PSK, 100 baud	+	+
Demodulator FFSK, 10-12000 Baud, Shift 50 Hz-16 kHz	+	+
Demodulator FSK, 10-2400 Baud, Shift 50 Hz-3.5 kHz, Center freq. 0.5 kHz-3.5 kHz	+	+
Demodulator GFSK, 10-12000 Baud, Shift 50 Hz-16 kHz	+	+
Demodulator Mark-Space FSK, 10-300 Baud, Shift 50 Hz-3.5 kHz, Center freq. 0.5 kHz-3.5 kHz	+	+
Demodulator MFSK, Tone length 4-1000 ms / max. 64 Tones, Shift 50 Hz-3.5 kHz	+	+
Demodulator OQPSK, 10-12000 symbols/s	+	+
Demodulator QPSK, 10-12000 symbols/s	+	+

The actual values depend on the selected code. The full parameter ranges can be used when working with the source code.

	Technical Data Software	W51PC	W61PC
ADD	1 channel INMARSAT INMARSAT C/B/M/mM Monitoring System, with FAX/Voice/Data File-Recording, FAX-Viewer for B/M/mM , B Voice-Playback.	Prof.	SAT-Option
ADD	INMARSAT M/mini-M Monitoring System with internal DDC direct from 70 MHz IF (no external receiver required)	N/A	SAT-Option
ADD	SERIAL LINK, Serial data output over COM1-16 with	+	+
ADD	ALARM MONITOR, Automatic frame detection with 10 programmable strings (up to 50 char)	+	+
ADD	ALARM MONITOR, Automatic detected text-string saving to HD or LAN	+	+
ADD	ALARM MONITOR, Automatic SMS messaging to HD or LAN	+	+
ADD	SERIAL LINK, Serial data output over COM1-16 with	+	+
ANA	Real time Oscilloscope, resolution up to 200 us/div	+	+
ANA	FSK, HF Baudrate analysis with graphical display and cursor functions (Baud)	30-1000	30-1000
ANA	FSK, VHF/UHF Direct, Baudrate analysis with graphical display and cursor functions (Baud)	30-12000	30-12000
ANA	FSK, VHF/UHF Indirect, Baudrate analysis with graphical display and cursor functions (Baud)	30-4000	30-4000
ANA	FSK Baudrate history display with full graphical recall / averaging and cursor functions	+	+
ANA	Shift, HF, VHF/UHF Indirect analysis with graphical display and cursor functions (Hz)	50-3500	50-3500
ANA	Shift, VHF/UHF Direct analysis with graphical display and cursor functions, automatic noise gate (Hz)	50-24000	50-24000
ANA	Shift, VHF/UHF Indirect analysis with graphical display and cursor functions, automatic noise gate (Hz)	50-3500	50-3500
ANA	FSK Shift history display with graphical recall/averaging, cursor functions	+	+
ANA	Symbol rate VHF/UHF Direct, measurement and graphical display, cursor functions (baud)	30-24000	30-24000
ANA	Symbol rate HF, VHF/UHF Indirect, measurement and graphical display, cursor functions (baud)	30-4000	30-4000
ANA	Phase Plane Display, HF, VHF/UHF Indirect BPSK, QPSK, OQPSK DPSK. (baud)	10-2400	25-2400
ANA	Phase Plane Display, VHF/UHF Direct BPSK, QPSK, OQPSK (baud)	100-12000	100-12000
ANA	Phase Plane Display, VHF/UHF Direct DPSK. (baud)	100-2400	100-12000
ANA	Manual Measurement of the frequency shift(s) with movable cursors	+	+
ANA	Autocorrelation length, maximum no of bits	200'000	200'000
ANA	Autocorrelation, X-Y zoom with continuous numeric display of cursor position	+	+
ANA	Bit Correlation analysis. Raw FSK Analysis: Graphical display of demodulated data on a raster time line. For visual recognition of character and block lengths.	+	+
ANA	Bit length analysis. Graphical display of demodulated data, with automatic calculation of bit length	+	+

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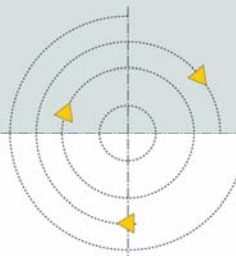
	Technical Data Software	W51PC	W61PC
	analysis with bit pattern display.		
ANA	HF MFSK Analysis: Graphical display of MFSK tones with histogram.	+	+
ANA	VHF/UHF Selcal analysis: Graphical display of FSK data for Selcal signal analysis.	+	+
ANA	Independent FFT display in most Modes	+	+
ANA	Pass-band Tuning in FFT display in most Modes	+	+
FFT	Real time FFT with adjustable cursors, 20 frames/sec	+	+
FFT	FFT bandwidth 500 Hz, 1 kHz, 2 kHz (4 Hz resolution)	+	+
FFT	FFT bandwidth 4 kHz (8 Hz resolution), 24 kHz (47 Hz resolution), 48 kHz (94 Hz resolution), 96 kHz (188 Hz resolution)	+	+
FFT	FFT Averaging	1-64	1-64
FFT	FFT, Rectangle, Hamming, Hanning, Blackman	+	+
FFT	Real time Waterfall display with cursor functions	+	+
FFT	Real time Sonagram display with cursor functions and history (full scrolling)	6.5	+
GUI	Standard Data File Format	TXT, BMP, Unicode	TXT, BMP, Unicode
GUI	WAVECOM Data File Format (with timestamps)	+	+
GUI	Split-screen display of sub-channels of TDM systems	+	+
GUI	Bit Inversion for 5 bit Alphabets	+	+
GUI	Message Type for most MIL-STD and STANAG modes (sync/async, data bits, parity bits , stop bits, MSB/LSB, ASCII/ITA2/ITA5/HEX/STANAG5066)	+	+
GUI	MIL-STD and STANAG modes, Parser for STANAG5066	V6.5	+
GUI	Bandpass Filter in most Modes (additional filtering in the decoder software)	V6.5	+
OPR	Automatic insertion of time stamps	+	+
OPR	Unlimited scroll back buffers for text and graphic modes	+	+
OPR	Automatic tuning of the demodulator to FSK signals	+	+
OPR	Automatic code check for FSK (HF/VHF/UHF) modes	+	+
OPR	Automatic classification and codecheck for FSK/MFSK and PSK signals (included in HF-classifier option)	CL-Option	CL-Option
OPR	Automatic decoding of the detected mode	+	+
OPR	Automatic determination of frequency shift	+	+
OPR	Automatic determination of FSK center frequency	+	+
OPR	Automatic determination of baud/bit rate	+	+
OPR	Automatic determination of signal polarity (not all codes)	+	+
OPR	Automatic determination of repetition cycle	+	+
OPR	Automatic phasing	+	+
OPR	Integrated error correction in all FEC and block coding modes	+	+
OPR	Continuous measurement of baud rate (IAS) and keying speed	+	+
OPR	Automatic noise gate for VHF-UHF-SHF analysis modes	+	+
OPR	Automatic demodulator tuning to FSK	+	+
OPR	Automatic demodulator tuning to FFSK signals	+	+
OPR	Automatic determination of drum speed in fax modes	+	+
OPR	Automatic determination of IOC in fax modes	+	+
OPR	Zoom and phasing function in fax modes	+	+
OPR	Automatic CRC recognition of all PACTOR-II and PACTRO-II-FEC systems	+	+
OPR	Manual CRC setup of PACTOR-I systems	+	+
OPR	Automatic phasing and synchronization of all block lengths in SWED-ARQ and SI-ARQ	+	+
OPR	Automatic phasing of all baud rates in PACTOR and G-TOR modes	+	+
OPR	Variable Baudrate for all HF-modes	+	+
OPR	Called number and transmission mode display for pager modes	+	+
OPR	Automatic Level Setting	N/A	+
OPT	EasySatSystem, Multi Channel INMARSAT B/M/mM Monitoring System	N/A	+
OPT	Streaming (from Sound-Devices or from WAV-Files)	V6.5	+
OPT	Database controlled receiver and decoder control application	Ask	Ask
OPT	HF-Classifier	CL-Option	CL-Option
OPT	BitView Tool	N/A	BV-Option
RCI	DCOM, Remote Control over LAN	+	N/A
RCI	TCP/IP Remote Control with WAVECOM GUI	+	+
RCI	XML Remote Control (with API or TCP/IP Interface, Metadata)	+	+
RCI	Bitstream: Raw, synchronized FSK/PSK bitstream available through remote control interface.	Prof.	Prof.
RCI	Remote Control with WAVECOM GUI, full functionality over LAN/Internet (encrypted and speed optimized)	+	+
SYS	OS WINDOWS XP/2000/2003, 32-bit (tested with English version)	+	+
SYS	No Interrupt required	+	+
SYS	Minimum computer requirements	1 GHz, PIII	P4,1.6 GHz
SYS	min. Screen Resolution (SVGA)	800x600	800x600
SYS	max. Screen Resolution	No Limit	No Limit

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	Technical Data Software	W51PC	W61PC
SYS	Mass storage	PC/LAN	PC/LAN
SYS	Printer Support	+	+
SYS	Simultaneous operation of cards in one PC (depends on the running mode)	8/4	8/4
SYS	Files limited only by Hard Disk or LAN resources	+	+
SYS	PACTOR-III, CLOVER-2000, CLOVER-2, CODAN-9001 and SENAO requires USB-Dongle	N/A	Code-Option

CLOVER-2000 Code option, only available for professional users, each code requires a separate license

System	Half-duplex ARQ
Center frequency	In the range (−3000, 3000) [Hz]; automatic frequency control (AFC): +/−50 Hz
Speed	62.5 Baud
Modulation	PSK2A, PSK4A, PSK8A, PSK16A, ASK2PSK8, ASK4PSK16, 2DPSK2A; 8 tones
Additional Info	ITA-5

CLOVER-2 Code option, only available for professional users, each code requires a separate license

System	Half-duplex ARQ
Center frequency	In the range(−3750, 3750) [Hz]; automatic frequency control (AFC): +/−50 Hz
Speed	31.25 Baud
Modulation	PSK2A, PSK4A, PSK8A, PSK16A, ASK2PSK8, ASK4PSK16, 2DPSK2A; 4 tones
Additional Info	ITA-5

PACTOR-III Code option, only available for professional users, each code requires a separate license

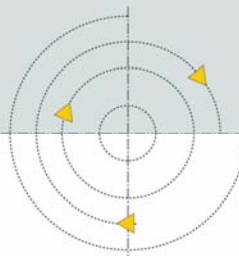| System	Half-duplex synchronous ARQ
Center frequency	In the range (−2900, 2900) [Hz]; automatic frequency control (AFC): +/−50 Hz
Speed	100.0 Baud
Modulation	DBPSK, DQPSK; 2, 6, 14, 16, or 18 tones
Additional Info	ITA-5 with block coding, CRC is displayed

CODAN-9001 Code option, only available for professional users, each code requires a separate license

System	Half-duplex asynchronous adaptive ARQ
Center frequency	In the range (−3100, 3100) [Hz]; automatic frequency control (AFC): +/−37.5 Hz
Speed	16 x 75 Baud
Modulation	Differential PSK4A; 16 tones
Additional Info	Data Stream Output Not available to all countries.

SENAO, Code option, only available for professional users, each code requires a separate license

Additional Info	Please Ask

CL-Option, the HF-Classifier is only available for professional users

Classification Bandwidth, 4 kHz, and 8 kHz (W61PC only)
Classification Sample Time 1.6 or 3.2 sec
CW
FSK-2, modulation index>0.5, Shift 25-2000 Hz, 25-2500 Baud
MFSK 4-34 carriers, 25-300 Baud
F7B
PSK2/4/8/16, A&B, 30-2400 Baud
OQPSK
Display of classified signals in FFT
Continuous mode for HF-classifier
Integrated code check of classified signals

SAT-Option, only available for professional users

SAT-A / B / C/ M /mM Mode (details see code table)
EasySat Software

BV-Option, the BitView Tool is only available for professional users

| Signal Source	File Bitstream, Text, Unicode, HEX	File Bitstream Binary Data W61PC IAS bitstream
Synchronization	Preamble	
Binary Modulation	NRZ-I NRZ-M NRS-S Bi-phase L (Manchester)	Bi-phase-M Bi-phase-S DBi-phase-M DBi-phase-S

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BV-Option, the BitView Tool is only available for professional users		
Bit Manipulation	De-Interleaving Extraction AND/OR/XOR/NOT Bit rotation	Bit Shift Bit Inversion DE-Stuffing (HDLC) Mirroring Cutting
Decoding/Equalizer	Viterbi-Decoding De-Puncturing	Difference Decoding BCH-Decoding
CRC & Polynomial	CRC (1..32) CRC-8 CRC-10	CRC-12 CRC-16 CRC-32 CRC (CCITT)
Channel Decoding	ARQ-E3 SITOR FEC-A Bauer	HNG-FEC RUM-FEC ITA-3 (M.342) ITA-5
Source Decoding (Alphabets)	Latin Third-Shift Greek Cyrillic Third-shift Cyrillic Hebrew Arabic Bagdad-70 Arabic Bagdad-80 (ATU-80) Bulgarian Swedish	Danish-Norwegian German French US ASCII Unicode UTF-7 UTF-8
Display Tools	Background color Font Right-to-left Word Wrap Bits per line Highlighting	Alignment Transparent Cut/Copy/Paste Undo/Redo x/- instead of 1/0 Graphic Bit display
Channel Decoding	Bit Statistic Autocorrelation	Signal Duration
User defined functions	C#, sample template	

Technical Data PC Cards	W51PC	W61PC
Mechanical Concept	Half length board	Half length board
Dimensions (LxWxH mm) , no panel	195x106x22	168x106x22
Weight in kg	0.5	0.2
PCI bus, 32 bit	rev. 2.1 or above	rev. 2.2 or above
Power requirement, (typ, values)	1.20A@+5V 0.21A@+12V 0.01A@-12V	1.0A@+3.3V 0.4A@+12V
Operating Temperature range	0° C to 50°C	0° C to 50°C
Storing Temperature range	0° C to 70°C	0° C to 70°C
Relative humidity (non-condensing)	20-95 %	20-95 %
External Demodulator Input	+	+
3-wire serial interface for digital receivers	N/A	+
AF Input 0.6-16 kHz, Input impedance >10 kOhm	1	Wideband AF/IF
IF variable Input, 16 kHz-1.5 MHz, Input impedance >5 kOhm	1	Wideband AF/IF
IF 10.7 MHz Input, Input impedance >10 kOhm	1	Wideband AF/IF
IF 21.4 MHz Input, Input impedance >10 kOhm	1	Wideband AF/IF
Wideband AF/IF Input, 50 Hz-25 MHz , tunable, requires filtered AF/IF signal output, Input impedance >1 kOhm	N/A	3
70 MHz, Wideband IF Input, 52.5 MHz-87.5 MHz, tunable, Input impedance >50 Ohm	N/A	1
AF / IF / HF Connectors	BNC	SMA
A/D Converter	16 bit	14 bit
Dynamic range	> 60 dB	> 60 dB
Direct digital synthesis DDS	AD9831	FPGA
DDS frequency resolution	< 1 Hz	< 1 Hz
DDC, (digital down conversion) with 96 db dynamic range, bandwidth configurable from 5 kHz to 500 kHz	N/A	+

Technical Data LAN Systems	W51LAN	W61LAN
Included decoder card	W51PC	W61PC

WAVECOM ELEKTRONIK AG
Hammerstrasse 8
CH-8180 Buelach
Switzerland
www.wavecom.ch
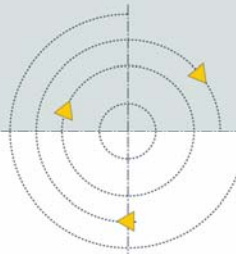
Technical Data LAN Systems	W51LAN	W61LAN
Metal Cabinet	+	+
Weight in kg	2	2.5
Dimensions (LxWxH mm), no panel	228.6x177x51	254x148x71
Power requirement, (typ, values)	1.1A@24V	4A@12V
AC Power supply (100-240V AC)	+	+
Optional DC Power supply	9-36V	10.5V-28V
Operating Temperature range	0° C to 40°C	0° C to 40°C
Storing Temperature range	0° C to 70°C	0° C to 70°C
Relative humidity (non-condensing)	20-95 %	20-95 %
Operating Systems	Windows XP	Windows XP
CPU	800 MHz	2 GHz
RAM	256MB	512MB
Hard Disk	>=20GB	>=40GB
LAN	3 x 10/100	10/100
RS232	1	1
USB	2	3
LPT, 1394, Mic., Phones, Line Out	N/A	+
Keyboard, Mouse, SVGA	+	+

Ordering Information	W51PC	W51LAN	W61PC	W61LAN
Available	No	No	+	+
Documentation, English User Manual	+	+	+	+
Online Help	+	+	+	+
Installation CD with latest software version and WAV signal samples,	+	+	+	+
Software update by CD or Internet http://www.wavecom.ch	+	+	+	+
Source Code (available to official government bodies only, against a written certificate)	Option	Option	Option	Option
2 Year Warranty	+	+	+	+
CE Label	N/A	N/A	+	+
Conformity to EN 55022:2004 class B, EN55024:2003, EN6100-6-2:2005, EN 6100-4-3: 1000-2700 MHz, EN 50371:2002	not tested	not tested	+	+
MTBF	>20'000h	N/A	>20'000h	N/A

+	Standard Version
Prof.	for professional user
N/A	not available
New	
+	Classification possible
-	Classification not possible
+/-	Classification depends on signal quality

Prices: see www.wavecom.ch
Specifications may change without prior notice
Delivery time and shipping charges on request.
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