



DECT AirSpy

General Description

The RTX2030 DECT AirSpy tool is a generic communication monitoring and analyzer tool for DECT/DECT 6.0/CAT-iq. It consists of a dedicated DECT RF Capture Unit and Windows application SW and can assist product developers/installers in performing:

- Protocol analysis
- Deployment analysis in both single and multi-cell environments
- Traffic analysis
- Slot and frame timing analysis

The Capture Unit

The Capture Unit can operate in three different modes - each optimized for different analysis scenarios:

- Asynchronous slide scanning mode for DECT spectrum discovery
- Synchronized cell scanning mode for DECT network cell survey and analysis
- Synchronized bearer receive mode for detailed protocol analysis between FP and PP

The Capture Unit receives DECT RF signals and performs native packet processing. Further analysis and presentation is done in the AirSpy Analysis SW tool.



DECT AirSpy Analysis SW

The PC application offers a multi window environment for control and presentation of information from the Capture Unit. The tool implements the following functions:

- Interpretation and display of information on different hierarchical levels:
 - Physical (EU, US, user configurable)
 - MAC (Nt, Pt, Qt and Mt messages)
 - DLC (Class-A messages)
 - NWK
- Real-time display of bearer position and physical parameters
- Protocol interpretation
- Post capture analysis
- Message filtering on FP and PP identities
- Physical parameter measurements:
 - Signal strength, RSSI
 - Timing analysis with DECT symbol time and 1/9 symbol time resolution
- Generate log files of captured information for further specific analysis

DECT



TECHNICAL SPECIFICATIONS

RTX2030 - DECT AirSpy

KEY FEATURES

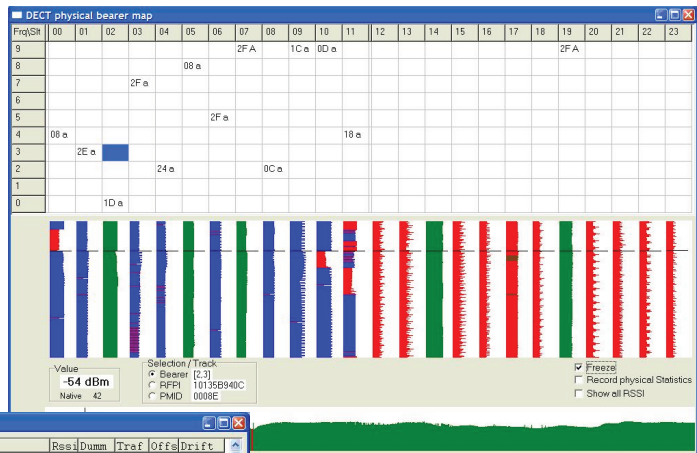
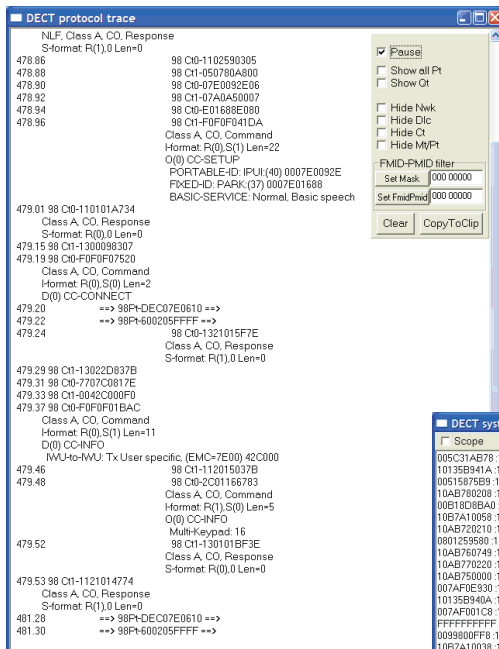
- Real-time display of bearer position and physical parameters
- Physical parameter measurements (Timing analysis, signal strength)
- Interpretation and display of information on different hierarchical levels (PHY, MAC, DLC, NWK)
- User configurable frequency band (EU, US)
- Various filtering options
- Protocol interpretation and post capture analysis
- Built-in diversity antennas

CAPTURE UNIT

- Frequency band DECT (1880-1930 MHz)
- Power source USB
- Connectors USB
- SMA (for external antenna)
- Receiver sensitivity <-92dBm at 10⁻⁴ BER

PC ANALYSIS SW

- Supported OS's Windows 2000/XP/Vista
- System requirements >733MHz Pentium
Available USB port
512 Mb RAM and 50 Mb Hard Disk space



#	RPT	Res	Id	Num	Traf	Offs	Drift
0	10 13 5B 94 1C	46	153	420	-0.75		
1	00 0C D0 63 F0	44	33	467	-0.24		
2	10 13 5B 94 2E	45	143	424	-0.74		
3	FF FF FF FF FF	44	26	303	-10.92		
4	01 10 9E 06 20	42	78	248	-2.02		
5	00 00 10 06 18	45	70	216	1.22		
6	10 AB 71 01 20	42	104	357	-0.77		
7	10 13 5B 94 0A	42	4	40	-9.38		
8	00 00 10 03 C0	29	16	261	-1.28		
9	00 0C D0 63 E8	42	70	242	-0.20		
10	00 B7 72 0C 58	37	62	188	9.59		
11	10 13 5B 94 13	32	7	429	-0.67		
12	00 F1 18 73 30	32	69	241	1.82		
13	10 B7 A1 00 50	41	129	356	-0.75		
14	00 5C 31 AB 78	30	33	292	5.16		
15	99 80 0E 18	37	67	321	2.78		
16	00 7A FC 2A C0	40	69	64	0.34		
17	00 7A FC F6 08	38	71	92	-0.53		
18	00 99 80 21 58	37	31	463	0.76		



RTX Telecom A/S · Stroemmen 6 · DK-9400 Noerresundby · Denmark · E-mail: technology@rtx.dk · www.rtx.dk
 Danish Headquarter tel.: +45 96 32 23 00 · American office tel.: +1 (408) 441-8600 · Hong Kong office tel.: +852 2480 6121