



SPECIFICATION
DIGITAL SIGNAL PROCESSING MODULE

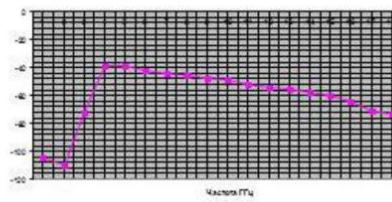
Simultaneous processing frequency range, MHz	0.01 - 30
Resolution ADC, bit	10, 14, 16
Number of FFT points	32768 (PC mode), 512 (main unit)
Bandwidth, MHz	0.0005 - 10 GHz

Demodulation types AM, FM, SSB, TV (AV)

"RADIO" CHANNEL

Frequency range1, MHz	0.01-30
Displayed noise level	-110
Within the whole bandwidth, dBm	-150
Within DDC bandwidth 1 kHz, dBm	
Value of the possible bandwidth, MHz	10, 5, 2, 1, 0.5, 0.2, 0.1, 0.05, 0.02, 0.01, 0.005, 0.002, 0.001, 0.0005
Frequency range2, MHz	30 - 4400
Displayed noise level	-110 (PC mode), -90 (main unit)
Within the whole bandwidth, dBm	-130
Within DDC bandwidth 1 kHz, dBm	
Input signal maximal level, dBm	5
Sweep speed, GHz/sec, max	10
Value of the possible bandwidth, MHz	2048, 1024, 512, 200, 100, 50, 20, 10, 5, 2, 1, 0.5, 0.2, 0.1, 0.05, 0.02, 0.01, 0.005, 0.002, 0.001, 0.0005
Identified data transfer standards	CDMA, GSM, 3G, 4G, WLAN, BLUETOOTH, DECT
Frequency range3, MHz	4000-18000

Graph of dependence the demodulated output signal at a frequency of 10 kHz from the frequency of the microwave signal incident on the antenna of the electromagnetic wave with a constant (frequency-independent) the electric field intensity 0.7 V/m.



Threshold sensitivity, W/cm²

-65

Antenna beamwidth, degrees

60-90

"WIRE LINE" CHANNEL

Frequency range 1, MHz	0.01-30
Displayed noise level in full range	- 90 (120 for PC mode)
at 1 kHz band for Main Unit, dBm, not worse	-125
Input signal maximal level, dBm	20
Maximal permitted input voltage, V	380
Value of bandwidth IF, kHz	6800, 2500, 630, 150, 75, 40, 10, 5, 1 e` 0.5
Gain input amplifier	-5, 1, 7, 13, 19, 25, 31, A'KG
Frequency range 2, KHz	0.3 - 15
Displayed noise level in full range, dBm, not worse	-115 (140 for PC mode)
Input signal maximal level, dBm	20
Gain input amplifier	14, 26, 38, 44, 50, 56, AKG
Common-mode interference attenuation factor, dB	60
Maximal permitted input voltage, V	250
Frequency range 3, MHz	30-3000
"OPTICAL" CHANNEL	
Dynamic range, dB	60
Frequency range, MHz	0.01-30

INFRARED PROBE ST131

Spectral range, nm	770-1600
Angle of sight, degrees	30
Wire length	1.5
"ACOUSTOELECTRIC" CHANNEL	
Frequency range, KHz	0.01-125
Displayed noise level in full range, dBm, not worse	-100 (148 for PC)
at 1 kHz band for Main Unit, dBm, not worse	-120
Input signal maximal level, dBm	-5
Gain input amplifier	6, 14, 20, 26, 34 e` 40
MAGNETIC FIELD ST 131	
Frequency range, Hz	30 – 30000
Transformation ratio (1000Hz), B*m/A	1.00±0.01
Threshold sensitivity, A/m*Hz ^{1/2} , less than	2*10 ⁻⁶
NON -LINEAR JUNCTION DETECTOR	
Frequency of test signal, kHz	150-220
MAIN UNIT	
Dimensions, mm	190x97x50
Indication	3.5" 240x320, TFT 262144 colors
Interface	USB 2.0, 200 Mbit/s
Power supply	6 AA batteries (rechargeable batteries)

DELIVERY SET	
Main unit	1
UHF converter (ST131.UHF)	1
Broadband UHF antenna (ST131.UHF.A)	1
Wire line adapter (ST131.AWL)	1
Leads	1
Main unit supporting block	1
Main unit shoulder holder	1
Headphones	1
Tripod	1
Power supply unit	2
AA batteries	8
Mini-disc with software	1
User manual	1
Supplementary set	
SHF Detector ST131.SHF	
IR probe ST131.IR	
Magnetic field probe ST131.MF	
Testing devie ST131.TEST	