Converter for search and analysis of signals in 220 V network, wire lines and

optical IR channel

RS/L plus converter extends the possibilities of the analyzer. It allows you to receive low frequency signals, which are transmitted via cables of AC mains with 220 V voltage, or via wire, especially, telephone lines without modulation or on carrier frequencies from 600 GHz to 10 MHz. Using an additional probe, the device receives and demodulates impulse signals in optical (infrared) range.

The converter transfers low frequency range in a radio range (approximately 120 MHz), where special software, which is included into the program of system's control, carries out signal analysis

To start the operation with the converter it is necessary to connect the power network (simultaneously a sensor for signal acquisition is connected in the power network), then connect CP-50 "Antenna" to the converter's input, and its output – to CP-50 the analyzer's input. For control of signals of IR range, it is necessary to connect the corresponding sensors to the corresponding inputs of the converter. When the sensors are connected, set the analyzer's receiver for the converter's frequency indicated on its housing.

Technical specifications:

Main voltage, V	220
Bandwidth (-3 dB), kHz	0.6-10000
Line-input sensitivity: band 12 kHz, S/N -3 dB, mV	2.5
Conversion frequency, MHz	110-150
Conversion frequency instability in temperature range 10-50 °C	5×10^{-6}
Output impedance, ohm	50
Level of heterodyne at RF output, dBm	-60

OOO SPF "Radioservice"
125130, Moscow, Staropetrovskiy proyezd, 7A, building.25
Tel./Fax: +7 (495) 627-57-17 http://radioservice.ru

Dynamic range by intermodulation distortion, dB	40
Conversion ratio by network input, µV/V	160
Conversion ratio by line input, µV/V	1000

Technical specifications:

Range of spectral response	0.47 – 1.12 µm
Total responsivity	6 mA/lm
Diameter of photosensitive element	10 mm
Photodiode type	FD-24K

OOO SPF "Radioservice"
125130, Moscow, Staropetrovskiy proyezd, 7A, building.25
Tel./Fax: +7 (495) 627-57-17 http://radioservice.ru