



## Combiner equalizer ace-xx02



ACE-xx02 is an Active L-band Combiner Equalizer intended for combining the signals of eight independent IF carriers at 950 - 2150 MHz frequency range, independent power adjustment and AGC in each channel.

ACE-xx02 is an Active L-band Combiner Equalizer intended for combining the signals of up to 16 independent IF carriers at 950 - 2150 MHz frequency range, independent power adjustment and AGC in each channel.

The Combiner has up to 16 inputs (4, 8, 12 or 16) and two outputs. One of the outputs ("OUT") is main, another ("AUX OUT") - for control. "OUT" outputs the total RF signal and HPB power supply voltage +24V. All inputs and outputs have F-type sockets (female). The control output has 30 dB lower power level than the main one. The tuner or the monitor can be connected directly to the control output for signal quality assurance. The case of the eight-channel Combiner-Equalizer Unit is designed for its use in standard 19" rack. However, it can be used as desktop device.

### KEY FEATURES:

- combining signals in a wide frequency range
- high output power linearity (low intermodulation distortions)
- separate power adjustment in each channel
- ALC schemes with big range of threshold levels in each channel
- small amplitude and phase distortions allow combining signals with any type of modulation
- convenient and evident adjustments
- high output signal stability

This product's main purpose is operating as a part of the Central or Base stations of such multimedia systems as MITRIS, LMDS, LVDS and other, which intermediate frequencies are located in 0.95 - 2.15 GHz bandwidth and which are intended for multi-channel TV broadcasting and data transmission in an interactive mode. Main feature of the device is wide use of automatic adjustments (ALC) that allows reaching high stability of RF output power.

Control of output power levels in each of channels is carried out by threshold level retuning of ALC schemes. Threshold levels for each of channels are established with keyboard use on the front panel of the block, and their levels are shown on the LED indicator. For descriptive reasons regulation process of these levels also are shown in the form of shone columns on the liquid crystal indicator. The step of output power level tuning is equal 1dB.

The device provides high linearity of the amplitude characteristic, low intermodulation distortions, small non-uniformity of the amplitude-frequency characteristic and small non-uniformity of a group delay that allows using it for combining the signals with any type of modulation.

Thanks to presence of automatic adjustments the device also has high temperature stability. The level of temperature instability is defined only by temperature instability of output power detectors in each of channels and in the range of working temperatures it does not exceed 0.2 dB. Use the microcircuits with very big range of regulation (50dB) in regulation stages of output power allows (no less than 30dB) to largely change threshold level of an ALC in each of channels. Thus the ALC range at any threshold level is equal no less than +/- 10dB from nominal level.

<b>Inputs / Outputs</b>	
<b>Number of inputs, connector type</b>	up to 16 x F-type (4,8,12 or 16), Female, 75Ω (N-type, Female, 50Ω - optional)
<b>Output, connector type</b>	1 x F-type, Female, 75Ω (N-type, Female, 50Ω - optional)
<b>AUX Output (-20 dB), connector type</b>	1 x F-type, Female, 75Ω (N-type, Female, 50Ω - optional)
<b>General parameters:</b>	
<b>A working range of frequencies, MHz</b>	950 - 2150
<b>VSWR inputs/outputs, no more than</b>	1.6
<b>Gain flatnes</b>	5 dB
<b>The range of power level adjustment into each of channels, dBm</b>	70 - 100
<b>The Maximum level of the input modulated signal, dBm, no more than</b>	-10
<b>The maximum total output power of the modulated signals on OUT sockets, dBm, no more than</b>	0
<b>Power Supply</b>	
<b>Input Voltage</b>	110-240 VAC, 50/60Hz
<b>Power Consumption</b>	
<b>Environmental</b>	
<b>Operating Temperature</b>	0°C to 45°C (32°F to 113°F)
<b>Storage Temperature</b>	-20°C to 80°C (-4°F to 176°F)
<b>Operating Humidity</b>	90%, non-condensing
<b>Mechanical</b>	
<b>Dimensions (W x H x D)</b>	1RU: XXXmm x XXmm x XXXmm
<b>Weight</b>	1RU: X Kg

Taking into consideration that we (ROKS PrJSC) are developer and system integrator, also do not stop on our technical growth and improvement, know that view of all our devices and equipment including their technical parameters may be different from pictures presented on website and parameters listed on each device webpage.

**Note!** All details customer has to confirm in advance during ordering and before payment. Those parameters that were not specified and / or were not agreed while ordering will be implemented as basic at the discretion of the manufacturer. Each our customer has 1.5 year warranty and 7 year aftersales support for whole range of our products.