

## Warning!

Please read the user manual included in this work as it contains important information related with safety of installation and use of the device.

Only persons who read the user manual may use the device.

The user manual must be kept because it may be required in the future. The device is to be used exclusively for purposes specified in this user manual.

The device must be unpacked prior to starting-up. After removing the packaging make sure the device is in working order.

If the product has defects, it should not be used until it is repaired.

The product is intended for use at home and commercial use and may not be used for other than intended use.

The manufacturer is not liable for damages resulting from not adhering to the rules contained in the user manual, therefore, we recommend to follow the aforementioned safety rules for operation and maintenance of the device. In this way you will ensure yourself safety and avoid causing damage to the device.

The manufacturer and the supplier are not liable for losses or damages arising out of the product, including financial or intangible losses, loss of profits, income, data, pleasure from use of the product or other products related with it - indirect, incidental or consequential loss or damage. The above provisions apply whether the loss or damage concerns:

1. Deterioration of quality or the lack of operation of the products or products related with it due to damage as well as the lack of access to the product when it is undergoing repair, which results in stoppage the loss of user's time or a break in business activity;
2. Improper results of operation of the product or products related with it;
3. It applies to losses and damages according to any legal category, including negligence and other losses, termination of a contract, expressed or implied guarantee and strict liability (even if the manufacturer or the supplier was notified about the possibility of occurrence of such damages).

### Safety measures:

Particular attention at designing was directed to quality standards of the device where ensuring safety of operation is the most important factor.

The device must be secured against contact with caustic, staining and viscous fluids.

The NEON+ meter is designed to DVB-T parameters measurement. Analyzer offers the following measurement modes for analog channels: channel level, V/A and C/N ratios. For digital channels allows the measurement of channel power. In DVB-T system is possible to measure the quality of reception: Modulation Errors Ratio MER, Bit Error Ratio BER, before and after the decoder Viterbi, bad packets after decoder counter Reed-Soloman and constellation diagram. Meter enables also automatic define the modulation parameters of the DVB-T channel (channel frequency, number of subcarriers, GI, FEC and modulation type). Analyzer allows to measure the DC and AC voltage of the remote TV power adapter and distribution and broadcasting networks. The NEON+ can be connected to the PC to access to the other modes.





# User Manual

Code: NEON+  
DVB-T SIGNAL METER **NEON+**

Frequency range:	45 ... 865 MHz
Frequency step:	125 kHz
TV system:	CCIR default (to edit via PC)
Level measurement range:	30 ... 120 dB $\mu$ V
Level measurement step:	0.1 dB
Level measurement accuracy:	$\pm 1.5$ dB
COFDM-2k/8k modulation:	QPSK, 16-QAM, 64-QAM
Hierarchy of modulation:	a = 1, 2, 3, 4
FEC:	1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval:	1/4, 1/6, 1/16, 1/32
BER measurement range:	10 <sup>-3</sup> ... 10 <sup>-8</sup>
MER measurement range:	18 ... 35 dB (for QAM64)
Backup time:	min. 3 hours
Main features:	<ul style="list-style-type: none"><li>• Pre-amplifiers powering 12/24 V DC</li><li>• For analog channels: channel level, V/A and C/N ratio</li><li>• For digital channels: channel power, MER, preBER, postBER</li><li>• Measurement modes: Full-scan, ripples, spectrum, MER/BER, constellation</li><li>• Data recorder: channels and measurements plans</li></ul>
PC software allows to:	<ul style="list-style-type: none"><li>• Operation in device virtual mode: measurement and displaying signal parameters as bar graph, spectrum analysis, quality parameters of receiving DVB-T signal and constellation diagram</li><li>• Displaying, creating, editing, loading and saving of the TV systems tables to the meter, channels plans, measurements recorder pages</li><li>• Saving and printing the measurements reports</li></ul>
Weight:	0.45 kg
Dimensions:	190 x 94 x 32 mm
Guarantee:	2 years

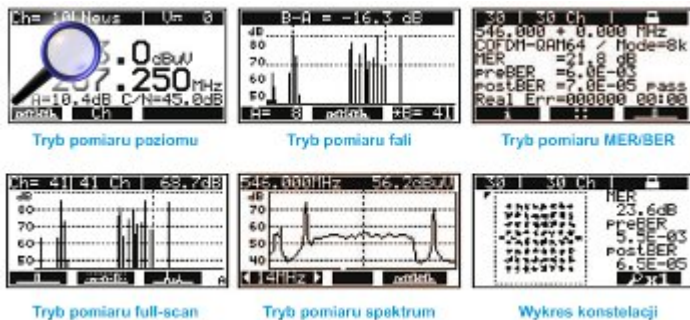
Bottom view (USB port and power socket visible):



Top view (input connector visible):



Meter measuring modes:



- 1) Level measurement mode
- 2) Wave measurement mode
- 3) The MER/BER measurement mode
- 4) The full-scan measurement mode
- 5) Spectrum measurement mode
- 6) Constellation diagram

In the kit:



## PACKAGE

Dimensions (L x W x H): 0x0x0 mm	Gross Weight: 0 kg
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