



### Features:

- ❑ Full compatibility with the IEC 736 standard
- ❑ Fully automatic
- ❑ Automatic procedures for meters testing
- ❑ Efficient calibration and legalization
- ❑ Independent waveforms for voltage and current signals
- ❑ Different meter communication systems
- ❑ Network operation

The **LS-3 testing stand** is a fully automatic system enabling calibration and legalization of electric energy meters. The automatics include power sources, reference standards, photoelectric scanning heads and other elements of the system. All these elements are controlled through a Windows® based executive program.

The use of the latest design signal processors and advanced technologies of signals synthesis, as well as the unmatched precision, quality and functionality qualify the system for testing all kinds of electric energy meters available on the market, from the simplest electromechanical ones to multi-functional electronic meters, including the prepaid, multi-system, multi-quadrant meters with power recorders, and other.

For determining the tested meters errors, the **LS-3 testing stand** employs the *reference standard meter method*. The error of the tested meter is determined by counting impulses generated by the reference standard






within gating time determined with the photoelectric scanning head, which detects the meter disc movement or with the LED flash of the tested meter.

All kinds of other tests indicated in the subject norms are available, such as the test of no-load condition, the test of starting condition, the test of meter constant, the test of maximum power demand indicator, and many other. An important feature of the system is the fact that it performs automatically additional operations facilitating the testing process, which are not defined in an open way, e.g. the system automatically sets tested meters in the mark-in-front position before performing the test of no-load condition or the test of starting condition.

Thanks to excellent parameters, great functionality and flexibility the **LS-3 testing stand** finds application in national laboratories of metrology and other customers interested in electricity meters testing.

# Technical specification

## Basic executions of LS-3 Testing Stand

<p>Tests</p>	<p>Basic error; checking the starting current; checking the no- load run; checking the meter constant; checking the impulse outputs; checking the maximum demand indicator; pre-heating; testing the influence of frequency, harmonic distortion, voltage, current and other- parameters on the meter error;</p>		
<p>Types of Meters</p>	<p>Active or reactive energy meters; for 2, 3 or 4 wire systems; electromechanical (also with impulse outputs) and electronic (static); multi- tariff, up to 16 tariffs; with multifunctional inputs/ outputs 4/16; with maximum demand indicator; with different arrangement of voltage and current terminals; with non- homogenous output impulses;</p>		
<p>Reference Standard</p>	<p>RD-30 Dytronic Three-Phase Standard with typical accuracy 0.01%.</p> 	<p>RD-31 Dytronic Three-Phase Standard with typical accuracy 0.005%.</p> 	<p>RD-33 Dytronic Three-Phase Standard with typical accuracy that is within traceability uncertainties.</p> 
<p>Power Source</p>	<p>C300 Three-Phase Power Calibrator and Tester</p> 		
<p>Stand</p>	<p>Multifunctional Photoelectric Scanning Head GS- 10 enabling the readout of both Marks from the electromechanical meters and impulses from the electronic meters.</p> 	<p>FDD-3 Quick Fixing Device</p> 	
<p>Software</p>	<p>AsTest Software for Windows</p> 		
<p>Accessories</p>	<p>ADA Signal Adapter</p> 	<p>IEC1107/RS232 or IEC1107/USB2.0 Optical Port Reader</p> 	<p>...other</p>