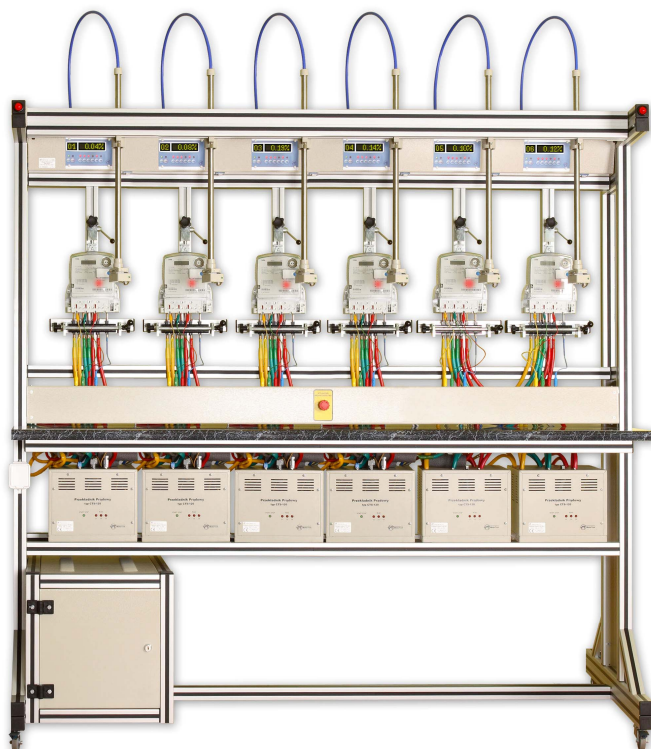


### Features:



- ❑ Stable construction of light and rigid aluminum profiles
- ❑ Easy to assembly, disassembly and transport
- ❑ Controller with keyboard and error display on each position
- ❑ Universal photoelectric scanning head
- ❑ Optional quick fixing device on each position
- ❑ Relays for switching on and off the voltage on the tested meters, individual for each position
- ❑ Safety cut-outs
- ❑ Voltage presence optical signaling with red LEDs
- ❑ Additional sockets for mains power supply
- ❑ Board and shelf for placing the tested meters
- ❑ Possibility of installing current and voltage transformers

The SR Suspension Rack, constructed from light and rigid aluminum profiles, is easy to assembly, disassembly and transport. In standard execution, the rack is two-sided and has 12 test positions. Each test position is equipped with a stand controller, a photoelectric scanning head and relays for switching on and off the test voltage to the tested meter (necessary to put meter's rotating plate in the mark-in-front position for the starting current test and the no-load run test).

Moreover, in addition, the rack is equipped with safety cut-outs, indicators of voltage presence on the terminals of the tested meter and auxiliary power sockets. There is possibility of equipping the rack with current and/or voltage transformers allowing for testing meters with closed links.

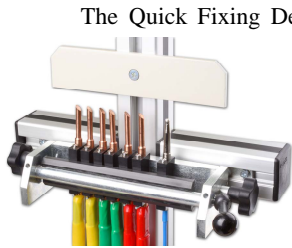
A calibration and legalization system may consist of one or more racks.

	SR-3	SR-1
Type of tested meters	Three-phase, Single-phase	Single-phase
Material	aluminum profiles	
Number of positions	10, preferable <b>12</b> , 20*	
Single position width	280 mm*	200 mm*
Rack length	(number of positions/2 - 1)* width of one position+480 mm	(number of positions /2 - 1)* width of one position +370 mm
Rack height	2360 mm*	
Rack width	780 mm*	

\* other value available on request

# Optional SR Suspension Rack Accessories

## Quick fixing device FFD

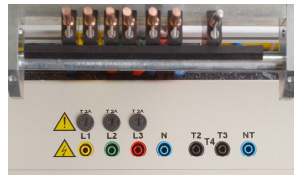


The Quick Fixing Device **FFD** is a mechanical device which may be optionally mounted on the racks of the system for calibration and legalization of electricity meters. It allows for very easy and quick installing the meters for tests and enables easy reorganization of the current pins outlay for the requirements of different standards: DIN, BS, IEC, ANSI and others. The pins are made of hard copper alloys and connected with flexible copper wires, which ensures durability and reliability for many years. Together with the quick fixing device, a suitable adjustable top clamp device is provided.

The quick fixing device FFD is available in version for single-phase meters (FFD-1) and for three-phase meters (FFD-3).

## Connection panel

The connection panel is the element of the rack, where the terminals of test voltages and the terminals for tariffs control, and other automatic systems of the position are situated.



The circuits of test voltages are protected with fuses and equipped with relays for switching the voltage on and off, controlled through a stand controller and provided individually for each tested meter. The applied technique of zero-crossing switching totally eliminates the possibility of generating interferences during switching.

A set of wires for connecting the test voltages and tariffs is a standard equipment.

## Individual Stand Controller IPO



The IPO Individual Stand Controller is made in modern technology utilizing programmable gate arrays FPGA (IPO Extended). Its primary tasks are: performing the tests, transferring the data to the host computer and displaying the results. Equipped with the local keyboard it enables remote control of the power source and the auxiliary equipment. An additional function is the communication with the tested meter through the serial port (IEC1107, RS232, RS485 or other).

Depending on the requirements, the controller may be equipped with LED displays (dot matrix or 7 segment) or LCD displays and other set of keys.



## Top clamp device

The Top Clamp Device is helpful during installation of the tested meter on the position. With its help, hanging the meter can be done very quickly and firmly, providing a suitable pressure of the FFD Quick Fixing Device pins to the current terminals of the meter.



## Turn of the position



The position turn is a useful option in situations when an intervention into the internal of the tested meter is necessary, e.g. during calibration. The turn range is  $\pm 45^\circ$  in vertical axis, which facilitates an easy access to all regulation points of the meter.

## The photo-heads adjustment

The rack construction provides the possibility of very easy positioning of the installed photoelectric scanning heads. The shift up/down, left-right and a rotation around the vertical axis of each photo-head individually is possible, as well as a simultaneous forward/backward shift of all photo-heads installed on one side of the rack.



## Current and Voltage Separating Transformers



The SR Suspension Rack can be optionally equipped with the high precision, electronically compensated voltage and/or current transformers, making it possible to test electricity meters with closed I-P links.



## Safety

A subject of particular care of MeterTest is user's safety. The rack is designed and manufactured as to ensure protection against electric hazards and each piece undergoes a wide range of rigorous safety tests. Additionally, there are safety cut-outs and an optical device signaling the presence of dangerous voltage available on each side of the rack.

## Ergonomics

The racks may be optionally equipped with desktops and shelves, to improve the ergonomics of the work place. They are placed at a suitable height, enabling easy access and suitable space arrangement (e.g. for storing the covers of the tested meters, instruments and other necessary tools). There are also mains sockets available for the operator disposal.