

## IPO-S ERROR CALCULATOR

- Clear presentation of the results at each position
- Information on the current test status
- Sensitivity control for the photoelectric scanning head
- Two simultaneous measurements
- Universal serial communication port
- Control of the auxiliary equipment, e.g. the current transformer
- High input frequency of the reference pulses
- Pulse input/output testing
- BNC input for a reference standard testing
- Remote control of the power source

## INTRODUCTION

The IPO-S error calculator is an individual stand controller and a key component of the ASTeL range of solutions. Its primary tasks are: performing tests, transferring data to the host computer, displaying results and communicate with the meter under test. Equipped with a local keyboard, it enables:

- pausing or resuming the current test,
- controlling local devices such as separating transformers (CT/VT) and voltage relays,
- remote controlling of the power source.

## MAIN FEATURES

**Test performance** – The IPO-S is equipped with two independent and simultaneously operated calculating blocks which allows to two independent test to be performed at one time, e.g. active and reactive test energy can be tested simultaneously.

**Meter type choice** – the choice of meter type, electromechanical or static, is performed automatically, and the sensitivity of the photoelectric scanning head GS can be adjusted with the local keyboard.

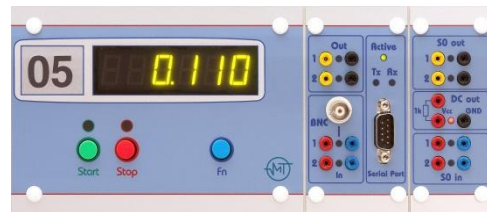
**Remote control of the power source** – is a helpful function that can be used during meters' adjustment process. With the controller keyboard, the load type can be switched back and forth between balanced and

single phase, as can the power factor between PF=1 to PF=0.5.

**Auxiliary equipment control** – the controller is equipped with two local interfaces. The 1<sup>st</sup> one is used to switch on/off voltage relays on the position. The position can be switched off if not used. Switching relays make it also possible to properly position marks on the disks of electromechanical meters ("mark catch"). The 2<sup>nd</sup> interface is used to control the separating transformer installed on the position (voltage or current one).

**Communication with a meter under test** – the controller is equipped with programmable universal serial port to communicate with the meter under test. All controllers in the ASTeL system are read in parallel.

**Pulse inputs/outputs** – the controller can simultaneously operate a number of pulse outputs from the meter under test, in addition to controlling its inputs ( e.g. tm/te). The outputs can be used for tariff control or pulse emulating. Pulse inputs accept high frequency, no extra frequency divider is needed.



**Standalone operation** – the controller can work as a standalone device which means without a host computer. In this mode the controller can be used to build a simple calibration stand.

## TECHNICAL DATA

Parameter	Value
Display	6 (optionally up to 8), 7 segment, 14.2mm height LED display
Keyboard	3 keys: START/RESTART, STOP and one programmable function key
Display resolution	Selectable through the system software: x.x, x.xx, x.xxx or x.xxxx
Inputs for scanning heads	2
Inputs for reference impulses	2 RS-422, up to 1MHz
On board universal inputs	2 up to 1MHz input frequency, galvanic isolation
On board universal outputs	2 galvanic isolation
Communication with auxiliary equipment	2 channels
Communication with the PC	Serial port RS-422
Communication with meter under test	RS-232/422/485, optical (IEC and ANSI), CS and other
Expansion slot	8 programmable general purpose digital channels with supply voltages, can be used to increasing inputs, outputs, reference pulses inputs and other
Voltage ON/OFF relay control	Yes
Communication with Current Separating Transformer	Yes

For additional technical details, please contact our sales department ([sales@metertest.eu](mailto:sales@metertest.eu))

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