

The **Local Evaluation Unit OPS** is a local microcomputer designed for comparison of reference impulses coming from the standard meter with optical impulses or reflexes from the black mark on the disk of the meter. Value of the measured error is displayed by the unit. The unit permits measurement of electromechanical as well as electronic meters. The built-in configuration possibilities enable to match variety of meter types and measurement requirements. Auto-calibration facility of the optical part of unit increases the work productivity eliminating necessity of manual sensitivity adjustment.

**Highlights**

- Remotely configurable either for reflexive mark of electromechanical meters or SO output or LED of electronic meters.
- The auto-calibration capability significantly increases the work comfort and productivity of the test system.
- The reflex scanner work with coded signal to suppress false light signals.
- The built-in remotely controlled dividers enable to evaluate high constant meters with light impulses up to 2.5 kHz.
- Variable pre-divider enables direct measurement of standard meters with impulse output up to 500 kHz.
- The built-in manual switch enables effective local individual units control and data input for tests with operator interactions.

**Technical data**

<b>Max. resolution</b>	0,002 %
<b>Displayed Error Resolution</b>	X.X%, X,XX% or X,XXX% (variable and selectable by software)
<b>Interfaces</b>	RS-422
<b>Supply</b>	9 V
<b>Consumption</b>	approx. 150 mA
<b>Maximal Frequencies</b>	
Impulses from the Standard	500 kHz
Optical Input	1 kHz
S0 Input	1 kHz
Impulse Input	1 MHz (TTL, CMOS)



Local evaluation unit OPS 410



OPS 410 in meter handling system



OPTS 2100  
(Optical sensor)



OPPS 1000  
(Positioning system for optical sensor)



OPTI 1000  
(Impulse output cable)



OPTH 1000  
(Optical communication head)

## Accessories

Type	Description	
<b>OPTS 2100</b>	Enhanced Optical Sensor for static and dynamic meters	•
<b>OPTI 1000</b>	Impulse (S0) cable for OPS unit	•
<b>OPTH 1000</b>	Optical Communication Head (IR and IrDA) with RJ connector	□
<b>OPTH 2000</b>	Optical Communication Head (IR and IrDA) with USB connector	□
<b>EDEX</b>	Data Exchange HW and SW system including connection infrastructure	□
<b>OPPS 1000</b>	Positioning system for Optical Sensor	□
<b>OPPS 2000</b>	Positioning system for Optical Communication Head	□
<b>OPFC 1000</b>	Fixing Clamp for Optical Sensor	□

• ... standard / □ ... optional

### EDEX (ELMA Data Exchange) – Simultaneous meter data exchange with meters

EDEX System provides enhancement of simultaneous data exchange (communication) with meters via optical interface or wired bus.

#### EDEX components

- communication infrastructure/interface for simultaneous meter data exchange with meters
  - set of communication converters Ethernet to serial communication RS-422
  - mechanical bar with connectors for connecting of optical communication head (OPTH 1000) for each position
- software support and compatibility with Software Package ELMA (SPE)
  - on the side of control computer system behaves as set of serial communication ports, one serial port for each position freely accessible
  - simultaneous meter data exchange according to 62056-21

#### EDEX available configurations

Type	Description
<b>EDEX 5S</b>	Simultaneous meter data exchange Interface for 5 meters / single side
<b>EDEX 8S</b>	Simultaneous meter data exchange Interface for 8 meters / single side
<b>EDEX 10S</b>	Simultaneous meter data exchange Interface for 10 meters / single side
<b>EDEX 10D</b>	Simultaneous meter data exchange Interface for 10 meters / double side
<b>EDEX 16D</b>	Simultaneous meter data exchange Interface for 16 meters / double side
<b>EDEX 20D</b>	Simultaneous meter data exchange Interface for 20 meters / double side

Any combination of above mentioned configurations can be used on customer system. Customer specific configuration is available on request.