PVS 100i
Phase identification – fast and precise

- **Phase identification at all voltage levels in real time**
- **GPS connection and GPS Cache (1 h buffer)**
- **Measurement on LV, HV and capacitive test points**
- **Easy to operate via touch display**
- **Eliminates safety hazards**
- **Saves time and money**

DESCRIPTION

Whether you are restructuring a network, planning new network systems or performing switching operations, precise phase identification is essential for the safe and reliable operation of a network.

The PVS 100i assists you in checking the phase quickly and precisely. It helps you to avoid faulty switching, eliminates safety risks, reduces operation expenses, prevents a one-sided load of the network and improves the service.

The PVS 100i system not only offers energy providers safety-related advantages but also economic benefits, making it an essential piece of equipment.

System description

The PVS 100i system consists of two identical devices: the base station and the mobile unit. The difference is defined in the menu. It is easy to operate via the touch screen.

How it works

The base station is connected to a known phase that serves as a reference. The phase positions at every voltage level can be identified with the mobile unit by comparing the actual phase angle with the angle of the reference phase.

Both devices are synchronised via a GSM connection and the phase assignment is displayed immediately. The GPS time signal is used to provide a highly accurate time base, which is stored for one hour via the internal cache.

The PVS 100i can be used anywhere thanks to its built-in rechargeable battery. The system is directly connected to the test object at network voltages of up to 400 V.

At higher voltages of up to 120 kV, the test is performed using a high voltage sensor that communicates with the PVS 100i mobile unit via bidirectional wireless.

The bright LEDs on the voltage sensor (which are even visible in sunlight) signal its activation as well as the phase identification. This makes it unnecessary to have visual contact with the mobile unit during the test. The user can keep his eyes on the sensor.

The measured data can be saved immediately on a USB stick.

Megger

TECHNICAL DATA*

PVS 100i

LCD touch screen	240 x 128 (transflective display)
GPS aerial with connection cable (option)	Length 20 m
Wireless modem for high voltage sensor	866 MHz (EU) / 915 MHz (US)
Accuracy at voltages up to 400 V/ up to 120 kV	± 0,5° / ± 10°
Operating voltage	115 V / 230 V; AC 50 / 60 Hz
Battery life	10 hours
Operating temperature	-20 °C ... +50 °C
Dimensions (W x H x D)	235 x 105 x 181 mm
Weight	3.2 kg
Protection class	IP 54 with housing closed

HVS 120 high voltage sensor

Wireless modem	866 MHz / 915 MHz (depending on country)
Maximaum voltage	120 kV
Battery life	5 hours
Dimensions (D x L)	85 x 120 mm
Weight	0.9 kg
Protection class	IP 54 with housing closed

ALL ADVANTAGES AT A GLANCE

- Direct phase indication with a GSM/GPS connection or with an available low voltage connection
- Extremely easy to input phase shifts/vector groups by using the zero key
- 2 GB USB stick
- Li-Ion battery for 10 hours of operation
- Operated via LCD touch screen
- Intuitive operating software
- High voltage sensor with bidirectional wireless transmission to PVS 100i and audio-visual phase signalisation
- Measurements on voltages from 5 V up to 120 kV
- Capacitive test points without further filters

* We reserve the right to make technical changes.

ORDER INFORMATION

Product	Order no.
Full set with 2 PVS 100i:	
High voltage sensor 120 kV	
Hook for high voltage sensor	
Charger high voltage sensor	
Insulation rod 110 kV incl. mounting set for HVS	
HR-LRM-adapter for capacitive HR-test points	
2 mains cables EU	
2 mains cables US (only for US-version)	
2 safety test leads 1.5m, black	
2 safety test leads 1.5m, red	
2 crocodile clips with fuse, black 10A/600V/50kA	
2 crocodile clips with fuse, red 10A/600V/50kA	
System carry bag	
USB stick	
Version for	
Europe, CIS, South africa, Hong kong, China	**1007220**
USA, Canada, Mexico, South america, Australia	**1007223**
Additional device (1 PVS 100i):	
High voltage sensor 120 kV	
Hook für high voltage sensor	
Charger high voltage sensor	
Insulation rod 110 kV incl. mounting set for HVS	
HR-LRM-adapter for capacitive HR-test points	
Mains cable EU	
Mains cable US (only for US-version)	
Safety test lead 1.5m, black	
Safety test lead 1.5m, red	
Crocodile clip with fuse, black 10A/600V/50kA	
Crocodile clip with fuse, red 10A/600V/50kA	
System carry bag	
USB stick	
Version for	
Europe, CIS, South africa, Hong kong, China	**1007222**
USA, Canada, Mexico, South america, Australia	**1007224**
Optional accessories	
Insulation rod 30 kV; 1040 mm	820015301
Insulation rod 30 kV; 1540 mm	820015302
Mounting set for high voltage sensor	820024744
Mains-testlead with crocodile clips	820021805
GPS module for outdoor installation	2007583
Tripod for GPS module	820016550
Connection cable 20 m for GPS receiver	820014560
Test lead with NH connector	820025178
GSM Outdoor unit incl. connection cable	820020946

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