

GDHX-9700 Phase Detector



GDHX-9700 Phase Detector is mainly used in electric power lines, phase, and phase sequence calibration in substation, with main functions including electrical inspection, phase calibration and phase sequence measurement. It uses double shielding and brand-new digital circuits, with strong anti-interference, accorded with EMC standards, suitable for various electromagnetic interference situations.

The high voltage phase signal of measured lead will be transmitted directly after treatment, the handset will receive and make phase comparison, determine the results after phase detection, real-time display phase angle difference and vector. It uses wireless transmission technology, safe and reliable, fast, and accurate, suitable for using at different voltage levels (10V-500KV). When checking the grid structure, it can accurately identify the relative phase of different leads for the three-phase connected line, without any electrical connection between two measurement components, which makes the application of the measurement device very flexible and safe.

Features

- Voltage range: 10V~500KV, applicable for various voltage grades.
- Accuracy: short distance: error $\leq \pm 3^\circ$; long distance: error $\leq \pm 3^\circ$.
- Sampling rate: 10 times/second.
- Date and time setting, date and time adjustment, easy for users to browse, view the historical data.
- Backlight setting: normally on, normally off, user-defined within 0~999s.
- Auto shut-down: never, user-defined within 0~999 minutes.
- In-phase: $\leq 20^\circ$ (user-defined if phase threshold is within 0-90°, default 20°)
- Out-phase: $> 20^\circ$ (user-defined if phase threshold is within 0-90°, default 20°)
- On-site calibration function: on-site calibration can be carried out on the tested wire to

ensure the accuracy of phase angle.

- Multiple mode design, better applicability, more secure, more convenient.
- Unique human-machine interface, simple operation.
- FCC antenna design, stronger signal, easier to penetrate walls, doors, and barriers.
- Double shielding, strong anti-interference, in full compliance with EMC standards.
- Charts and data display, easier to read, with date and time display function.
- Qualitative measurement: display by acousto-optic signal.
- Quantitative measurement: real-time display of phase angle difference, error $\leq 5^\circ$.
- Phase sequence check: positive phase sequence, negative phase sequence (120° , 240°).
- Under GPS satellite timing service, the detection distance between detector Xa and Ya is $\geq 500\text{km}$.
- Data storage capacity of 2000 groups. It can query and access to historical data.
- The length of standard insulation rod is 4m, and the applicable voltage grade of insulation rod is $\leq 220\text{kV}$.

Technical Parameters

Voltage range	10V~500kV
Power supply	Hand-held unit: large capacity lithium battery
	Xa & Ya detector: AA size alkaline battery (1.5V) 3pcs
Wireless transmission	Visual distance 150m
In-phase	$\leq 20^\circ$ (user-defined if phase threshold is within 0-90°)
Out-phase	$> 20^\circ$ (user-defined if phase threshold is within 0-90°)
Display accuracy	Quantitative measurement $\leq 5^\circ$
Resolution of phase angle	1°
Phase sequence measurement	Phase sequence is determined through clockwise 120° / counterclockwise 240°
Satellite timing range	2~30 minutes
Display	Positive type LCD screen, clear in the sunlight.
Working temperature	$25 \sim 50^\circ\text{C}$
Storage temperature	$10 \sim 55^\circ\text{C}$

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Relative humidity	≤95%RH, condensing
Hand-held unit	0.31 kg
Detector Xa	0.16 kg
Detector Ya	0.16 kg

Accessories

No.	Name	Qty	Unit
1	Hand-held terminal	1	set
2	Xa Detector	1	set
3	Ya Detector	1	set
4	The special hook	2	pcs
5	The special probe	2	pcs
6	220kV insulation rod	4	pcs
7	No. 7 alkaline battery (1.5V)	8	pcs
8	Power charger for handheld terminal	1	piece
9	Aluminum alloy portable box	1	piece
10	Operating instructions	1	copy
11	Test report	1	copy
12	Certification, warranty card	1	copy