

## S320A High Voltage Phase Sequence Indicator



- 1V-550kV Phase Sequence Indicator
- Phase Detection Distance: Up to 160m
- Intelligent Voice Feedback
- 3.5-inch true color LCD

## **DESCRIPTION**

S320A High Voltage Phase Sequence Indicator is a wireless, battery-operated instrument designed to detect the rotary field of three-phase systems and determine phase sequence. This instrument includes a wireless receiver, XY transmitter, and a retractable insulated rod. The receiver uses a 3.5-inch true color LCD screen, which can display the phase sequence results, frequency, and a vector diagram all at the same time. The distance between two cables being measured can be up to 160m on open ground. It can be used on cables with voltage ranges from 10V to 550kV. Not only can the results be received wirelessly, making it convenient to detect cables' sequences that are far apart, it can also be used using the non-contact method. Making it a much safer option for operators dealing with high voltage cables.

## **APPLICATION**

S320A is designed to detect the rotary field of three-phase systems and determine phase sequence. It can measure frequency, phase sequence, and conduct voltage tests.

## **SPECIFICATIONS**

Functions	Can be used for both high or low voltage long distance phase sequence detection, phase sequence indication, frequency measurement, and voltage testing.			
Power	Receiver: DC 7.4V 3000mAH rechargeable lithium battery Transmitter: DC 3.7V 1000mAH rechargeable lithium battery USB charging port, can work continuously for 10 hours when fully charged			
Transmission Method	315MHz and 433MHz wireless transmission			
Measurement Distance	Max. 160m			
Display	3.5-inch true color LCD			
Measurement Range	Phase Detection Voltage Level: AC 1V~550kV			
	Phase: 0.0°~360.0°			
	Voltage: 1kV~35kV			
	Frequency: 45Hz~75Hz			
Resolution	0.1°; 0.1Hz; 1V			
Accuracy (23 C±5 C, below 80%RH)	Phase Angle: ≤±10°			
	Voltage: ±15%±5dgt (1kV~35kV, high voltage overhead line, other application error ±25%±5dgt)			
	Frequency: ≤±2Hz			
Phase Difference	In phase: -30°~30°; out of phase: 90°~150° and 210°~270°			
Voice Feedback	Voice such as in phase, out of phase, X signal normal, Y signal normal, etc			
Size of Insulation Rod	3.2m long after extended; 0.6m retracted			
Data Storage	9999 sets			



Measurement Methods	Contact Method: When the bare wire voltage is less than 35kV, or less than 110kV for cables with a safety insulation sheath. Please use the insulation rod				
	Non-Contact Method: When the bare wire voltage is more than 35kV, or more than 110kV for cables with safety insulation sheath. Please use the insulation rod				
	Auxiliary ground cable measurement: if the measurement result is unstable or when the voltage is lower than 100V, connect the auxiliary ground cable to the ground to amplify the signal				
Voltage Test Indication	A positive voltage test will be indicated by a "beeping" sound from the transmitter				
Measurement Range	The measurement range will be automatically adjusted based on the voltage of the conductor				
Sampling Rate	2 times/s				
Dimensions	Transmitter: length width and thickness 145mm×60mm×50mm				
	Receiver: length width and thickness 207mm×101mm×45mm				
Backlight Brightness	Press the Up or Down Arrow button to adjust the backlight brightness				
Power Amplifier	Transmitter automatically amplifies the signal based on strength of the electric field, facilitating the phase-detection in a tightly packed environment				
Data Hold	Press the HOLD button while in testing mode to hold the data, and then press the HOLD button again to cancel the function				
Exit	Press the ESC button to exit from the current page and return to the previous page				
View Data	Press ENTER to view the saved data, and press Arrow buttons to change between saved data sets				
No-signal	When the receiver does not receive a signal from the transmitter the "" symbol will be displayed				
Automatic Shutdown	15mins after startup, the instrument will automatically shut down to reduce battery consumption				
Battery Voltage	When the battery voltage is low Transmitter: The LED will flash slowly to remind the user to charge the battery Receiver: the low battery voltage symbol will be displayed to remind the users to charge it when possible				
Rated Current	Transmitter: 20mA max; Receiver: 200mA max				
Instrument Weight	Transmitter: approx. 342g (including battery)				
	Receiver: approx. 450g (including battery)				
	Insulation rod: approx. 0.5kg (1 pc)				
	Total: approx. 5.61kg (including instrument box)				
Ideal Working conditions	–10 $^{\circ}$ $^{\circ}$ $^{\circ}$ $^{\circ}$ below 80%RH				
Ideal Storage Conditions	-10 ℃ ~60 ℃; below 70%RH				
Interference	Avoid strong electromagnetic field and 433MHz or 315MHz signals				
Dielectric Strength	Insulation rod: AC 110kV/RMS (between top and bottom when all insulation rods is fully extended)				
	Transmitter: 2000V/RMS (between both ends of outer housing)				
	Receiver: 2000V/RMS (between both ends of outer housing)				
Structure	Anti-dripping Type II, IP63				
Safety Standards	GB13398-92, GB311.1-311.6-8, 3DL408-91, DL/T971-2005				
	IEC61481-A2: 2004; IEC 61243-1 ed.2: 2003				

ACCESSORIES & ORDER DATA						
Description	Order Code	Description	Order Code			
S320A High Voltage Phase Sequence Indicator, 1 pc S320A		Included accessories for S320A				
		Transmitter, 2 pcs (X and Y 1 each)				
		Receiver, 1 pc				
		Antenna, 1 pc				
		Extendable insulation rod, 2 pcs				
1000 100 100 100 100 100 100 100 100 10	) I	Aluminum case, 1 pc				
		Hook, probe, 4 pcs (2 of each)				
		USB charger, 2 pcs (5V charger)				
V X		Charging cable, 3 pcs (2 round-hole, 1 mini USB)				
		Lithium battery, 3 pcs (inside the instrument)				
		Self-calibration line, 1 pc				
		Spring type auxiliary grounding wire, 2 pcs				
		User manual, warranty card,				
		certificate of conformity, 1 copy of each				

**SALES OFFICE** 

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