

HF-CH-211

Wireless High Voltage Phase Detector



This wireless high voltage phase detector adopts non-contact wireless sensing design. It accurately verifies phase consistency, phase sequence on HV lines, supports long-distance testing, equipped with insulating poles, portable and safe for substation field operation.

Technical specifications

Parameter	Value
Functions	High & low voltage wireless voice phase checking, frequency, phase angle, phase sequence and voltage detection test
Power Supply	DC 3.7V rechargeable lithium battery, USB charging port; approx. 10 hours continuous working time
Transmission Mode	315MHz, 433MHz wireless transmission
Maximum Phase Checking Distance	Approx. 160 m
Display Mode	3.5-inch true-color LCD screen
Measuring Range	Phase check voltage: AC 10V ~ 550kV Phase angle: 0.0° ~ 360.0° Frequency: 45Hz ~ 75Hz
Resolution	0.1° (phase); 0.1Hz (frequency)
Accuracy	Phase: $\pm 10^\circ$ (23°C $\pm 5^\circ$ C, RH $\leq 80\%$) Frequency: ± 2 Hz (23°C $\pm 5^\circ$ C, RH $\leq 80\%$)
Phase Discrimination Standard	In-phase: 30° ~ 30°; Out-of-phase: 90°~150° & 210°~270°
Voice Function	Voice prompts for in-phase, out-of-phase, X/Y signal normal, etc.
Insulating Rod Dimension	Fully extended: 5m; Retracted: 1m (5 sections)
Data Storage	9999 groups
Phase Checking Method	Contact: Direct contact for bare conductors ≤ 35 kV / insulated lines ≤ 110 kV Non-contact: Induction measurement for bare conductors > 35 kV & lines > 110 kV Both operated with insulating rod
Voltage Detection Indication	Buzzer beep tone on detector
Gear Switching	Automatic shifting
Sampling Rate	2 times per second
Device Overall Size	Detector: 145mm $\times$ 60mm $\times$ 48mm Receiver: 250mm $\times$ 100mm $\times$ 40mm
Backlight Control	Adjust brightness via up/down arrow keys
Induction Sensitivity Control	Auto gain adjustment based on electric field, adaptable to dense cable environments
Data Hold	Press HOLD to freeze data; press again to cancel
Exit Function	Press ESC to exit current page and return to upper menu
Data Query	Enter query mode with ENTER key; scroll records via arrow keys
No Signal Prompt	Display "----" when no signal received
Auto Power Off	Auto shutdown after 15 mins idle to save power
Low Battery Reminder (< 3.2 V)	Detector: Power indicator flashing Receiver: Low battery icon displayed
Rated Current	Detector: Max 35mA Receiver: Max 300mA
Weight	Detector: 205g (with battery) Receiver: 395g (with battery) Insulating rod: 1.45kg Total weight (with case): 9.8kg

Parameter	Value
Operating Temperature & Humidity	-10°C ~ 40°C, RH ≤80%
Storage Temperature & Humidity	-10°C ~ 60°C, RH ≤70%
Anti-interference	Anti strong electromagnetic interference; resistant to 315MHz / 433MHz co-frequency disturbance
Dielectric Strength	Insulating rod: AC 110kV/rms (full length both ends) Detector: 2000V/rms (housing terminals) Receiver: 2000V/rms (housing terminals)
Structure & Protection	Drip-proof Class II, IP63
Compliant Standards	GB13398-92, GB311.1-311.6-8, 3DL408-91, DL/T971-2005 IEC 61481-A2:2004, IEC 61243-1 ed.2:2003
Related Products	-

Standard scope of supply

No.	Item	Qty	Notes
1	Wireless High Voltage Phase Detector Host	1 Set	Main equipment
2	High Voltage Insulating Rod	1 Piece	Supporting use
3	Wireless Receiving Antenna	1 Piece	Original matching
4	Rechargeable Lithium Battery	2 Piece	Spare battery included
5	Special Charger	1 Piece	Special for equipment
6	User Manual	1 Copy	Operation & maintenance instruction
7	Product Qualification Certificate	1 Copy	Official certification
8	Hard Waterproof Storage Case	1 Piece	Packaging & storage

Compliance and documents

Applicable standards	[TO BE CONFIRMED] standard applied to this model
Calibration certificate	[TO BE CONFIRMED]
Optional accessories	[TO BE CONFIRMED]

Warranty and support

12-month warranty on every exported instrument. English operation manual and remote video guidance at commissioning. T/T, L/C at sight and deposit terms for bulk orders; sea, air or rail shipping.