KF86P Universal Relay Test Set

KINGSINE

The World's Lightest High-Power Universal Relay Tester

K68i

The most cost-performance 3-phase relay tester (Class:0.1)

KT210

The lightest portable CT/PT Analyzer

KS833

The most reliable 3-phase electrical calibration tool for lab use(Class:0.05)

KFA310

Ultra-light hand-held 3-phase protection relay tester

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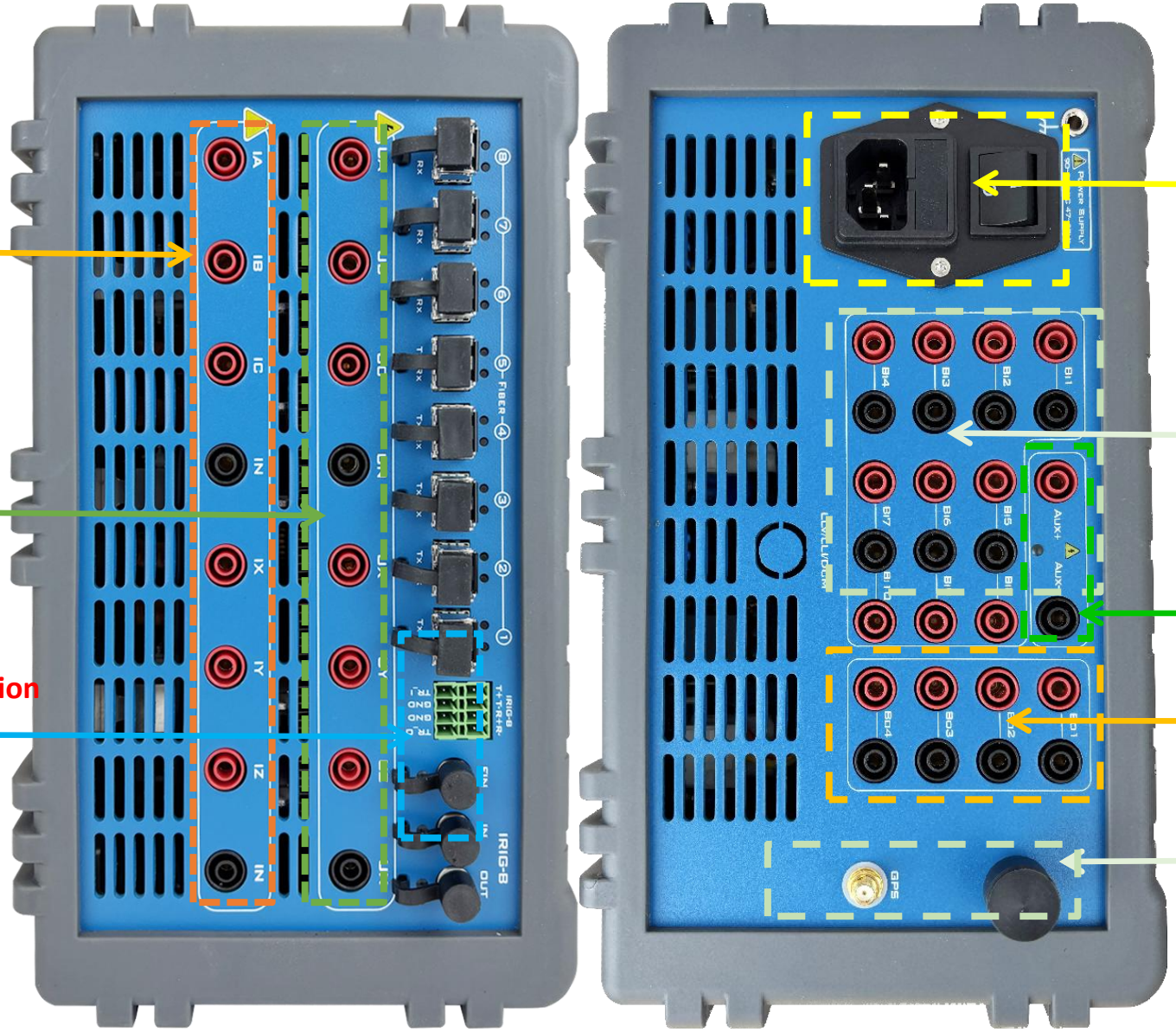
Current output
6×35A\425VA
3×70A\670VA
1×100A\1000VA

Voltage output
6×310V\105VA
3×620V\175VA

Time Synchronization
IRIG-B Fiber
IRIG-B Electric
External trigger synchronization



Power Supply & Switch
85V～265V (AC)
127V～350V(DC)

10 Pairs Binary input
0 V～300Vdc Or dry contact
(Binary input turn over potential can be programmable)

Aux.DC Output

4 Pairs Binary Output

GPS Port for End-to-End Test
Wifi antenna port

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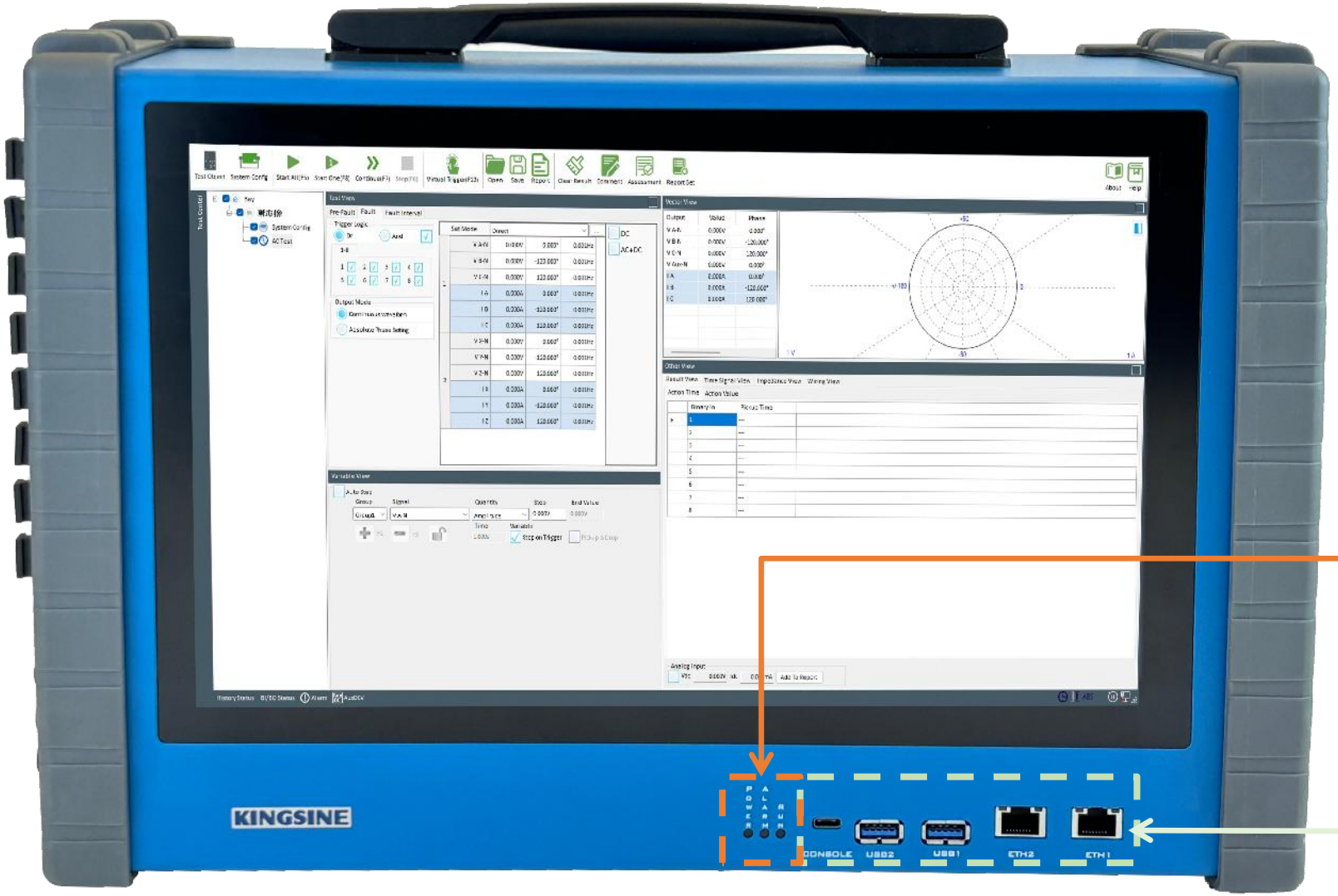

Equipment status indicator light

Ethernet port for cocmmunication
Serial port for debug
2 USB port for report and update

KF86P Universal Relay Test Set

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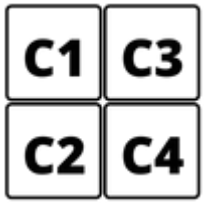
- Super portable test equipment applied in both smart substation and traditional substation all over the world
- Meticulously designed by KINGSINE, a leading Chinese technology company with over 24 years in the market and a leading supplier of test and measurement equipment to the Chinese government;

Important information:, Compact 6-phase relay test set with high accuracy & full solution (complying IEC61850 sampled value and GOOSE), fully meet all the requirements for detection and debugging of IEC61850 IEDs, Merge Units, station control systems and traditional protection relays

KF86 adopts Multi-Core SOC. avoiding the troublesome communication process caused by using data bus to exchange data

Core 1	**Core 2**	**Core 3**
Data Simulation	Command Process	Communication Computer



The KF86P system is highly integrated, allowing it to fully meet the testing and commissioning requirements for:

- Protection relays;
- Measuring and control devices;
- smart terminals;
- Merge units;
- Intelligent substation control systems.

KF86P Universal Relay Test Set

KINGSINE

- High Precision and Control of Electrical Quantities
- Cutting edge technology
- It allows testing Protection Relays (Digital, Electromechanical...), Merge Unit, Meters.....
- Complete Software for Test Automation
- 12 Independent Analog Channels
- Variable DC Battery Simulator
- I/O — 10 Pairs Digital Inputs (Dry or “Wet Contact”)
  4 Pairs Digital Outputs
- Free training
- Lifetime Technical Support
- Tutorials and Video Lessons
- 3 Year Warranty, extendable to 5 years
- Wi Fi — Integrated Wi-Fi Module
- IRIG-B — Time Synchronization Protocol
- GPS — Integrated GPS/BDS Timing Module

IEC 61850

- Automatically import SCL files (SCD, ICD, CID, NPI) to perform automatic setup of sampled values and GOOSE information and save sample values and GOOSE configuration information as a configuration file for testing;
- Support graphical display of SCD files, graphically display IED interconnect relationship and virtual terminal connection.

GOOSE

- Supports subscribing, publishing GOOSE messages;
- Multiple GOOSE control block messages can be subscribed/published;
- Automatically detects optical digital signals from MU, protection device and intelligent operation box, and realizes the function of automatic setting of sampling value and GOOSE information

SV

- Simultaneously inject analog signals and IEC61850 Sampled Value Messages;
- Up to 36 channels freely defined by the user;
- The channel quality of the outgoing SV message can be set and the simulation unit can be simulated and debugged

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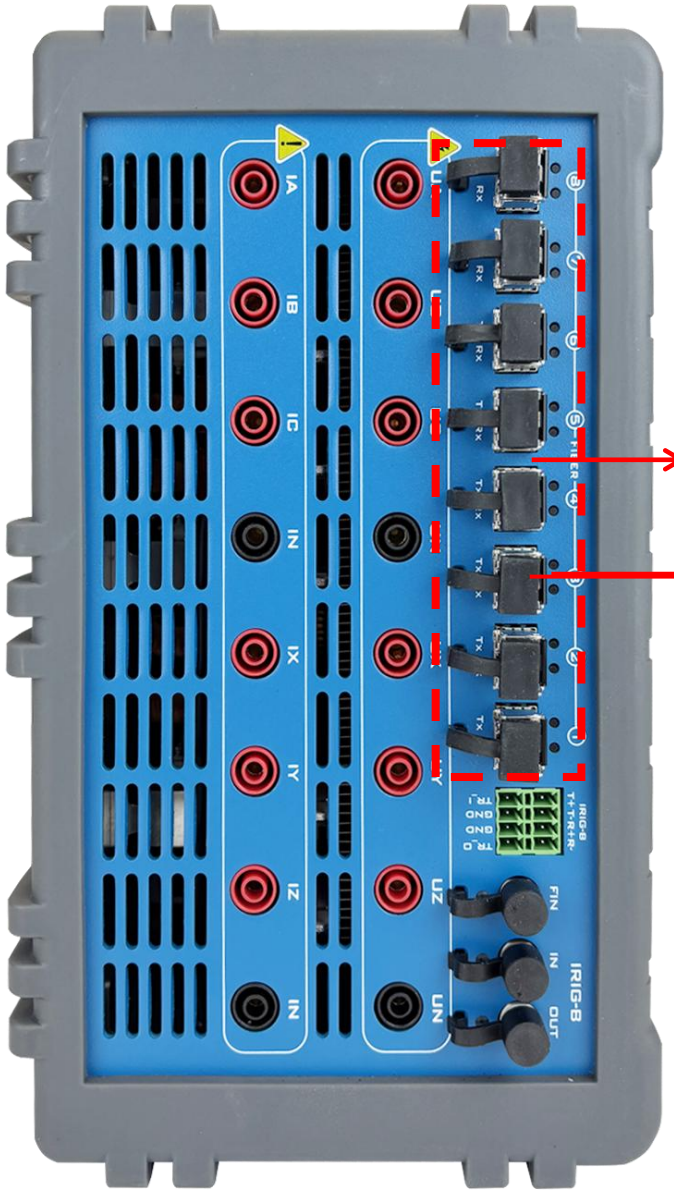


Fiber port (LC type)	
Type	100Base-FX (100Mbit,Fiber, full duplex)
Port Number	8 Pairs
Cable model	62.5/125μm(Multiple-mode fiber, orange)
Wave length	1310nm
Transmission distance	> 1Km
Status indication	SPD Green (lights): active connection Link\AcT Yellow (blinking): data exchange

Apply Two Fiber port type

RJ45 type Ethernet cable

LC type Fiber cable

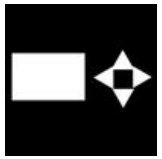
Simple and Powerful software

Ideal for testing various equipment such as:

Protection Relays
- Digital
- Electromechanical
- Static

Power Meters

Transducers



And many others

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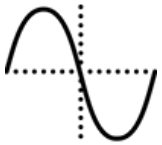
Automation - Test Modules


AC Test

Ramping

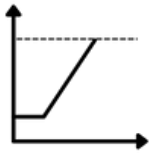
StateSequencer

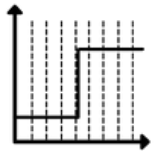
Harmonic

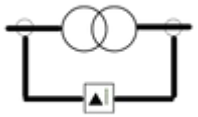
Frequency

Overcurrent

ZeroSequence

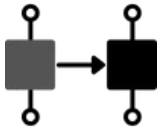

Differential


Harmonic Restraint


Differential Configuration

Distance

Power Swing


Reclose

Synchronizer

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Test Plan

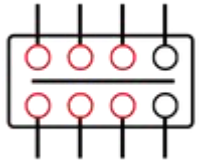
With just one “click” Test various functions

Templates

Create or use ready-made templates

Reports

Automatic Reports Formats: RTF, TXT customizable

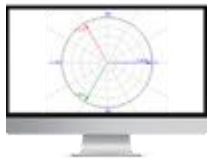


Wiring diagram

Easily view connections

Multiple Languages

English Portuguese...



Virtual Instrumentation

real-time monitoring

“COM” Concept

C = Connect and Configure

- IP definition;
- Connection status..

- Definition of system parameters;
- Digital I/O definition;
- Definition of Goose and Sampled Value channels;
- Identification of analog channels and digital I/O
- Aux channel voltage level selection. DC (if necessary)

O = Test Object

- Defines the object's nominal and fault conditions
- Characteristics of the protection function to be tested;
- General information of the protected electrical system...

M = Test Module

- Defines characteristics of Faults
- Time delays (Pre-fault time, fault time and post-fault time);
- Trigger Logic for Binary Inputs and Outputs;
- Visual Graphics defining test failures;
- Different views like: Vector View, Report View, Connection View, Time View etc.

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Kingsine Electric Automation Co., Ltd. has been specializing in Research & Development, production and sales of Electric Testing & Measurement Instruments since 1999 foundation who is also honored as the High-tech enterprise certification and Software enterprise certificate recognized by China authority. With about high development speed every year, Kingsine win the Chinese top manufacturer for electric test equipmentin the domestic relay-tester market.

Research & development:

Kingsine also own the strong technicians and experts and is capable of providing electric power test solution in conformity with customer's specifications, With his creative All-in-One design idea and many patents, Kingsine’s product has been well approved and recommended by China National Institute of Metrology and power research institutes of each provincial as well as CE certificate.

Manufacture:

With ISO 9001:2000 certified and Located the High-tech Zone downtown of Shenzhen neighbor Hong Kong, Kingsine integrates all precision processing and advancing manufacture method around mainly on Protection Relay Test Set, Standard Power, Power Calibrator, RTU-Tester & Multifunctional Power Meter, which ensure his products with 3-year quality warranty on free repair.

Marketing & Service:

Now Kingsine's products are approved by over 90 countries worldwide in many industries of electrical power, metallurgy, petrochemical, railway mining and relative scientific research institution as well as same trade of meter and protective relays factories, and getting the warm welcome from the world large Electricity & Energy Exhibition such as POWER-GEN International of USA, Middle East Electricity of Dubai, HANNOVER MESSE of Germany and FIEE Electrical of Brazil. Its Relay-Tester is suitable working for many world famous relay protection devices such as ABB, SIMENS, ALSTOM, TOSHIBA, SCHNEIDER, AREVA, SEL, GE etc and Kingsine also give the full service with his distribution net from many countries partners of European, Asia and Middle East.

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