

凱思隆科技股份有限公司

公司與產品簡介

KeithLink Technology Co., Ltd.

TEL: 02-29786535 FAX: 02-29782726 service@keithlink.com



http://www.keithlink.com

公司簡介



■ 手動探針台/探針座

提供各式量測應用之探針台/探針座‧適用於:晶圓(直流電性、或高頻)量測;液晶面板量測;觸控面板ITO薄膜、導電高分子薄膜、矽晶片、太陽能電池薄膜、金屬薄膜等‧各種薄膜的四點探針片電阻率導電度量測;太陽能電池薄膜量測;軟性顯示面板量測;以及客製化的量測需求。

■ Keithley 儀器軟硬體系統整合服務

整合手動探針台,提供Keithley量測儀器與客製化的量測程式。例如: MOSFET I-V、四點探針片電阻、溫度電阻、太陽能電池效率...等量測程式。

■ PLED/OLED 功能性測試系統

提供發光強度-電流-電壓(LIV)量測系統、壽命週期測試系統、及光電測試系統,可方便進行OLED(PLED) 有機太陽能電池、有機感測器等元件的特性分析、壽命週期參數測試、與製程中缺陷分析。

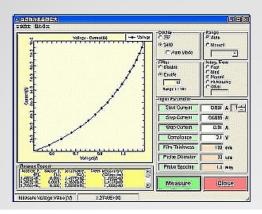
■ Active Probe (PicoProbe) 高頻探針

提供高頻探針、校正片、高頻探針座,亦提供客製化維修與訂做服務。









四點探針薄膜量測

Four Point Probe Sheet Resistivity Measurement

量測以下各種成型薄膜的片電阻(率)與導電度各類成形的金屬薄膜

- 觸控面板ITO/玻璃(PET)上的導電膜
- 太陽能薄膜電池上的矽導電膜
- 矽晶圓上的矽
- 導電高分子薄膜
- 其他薄膜

凱思隆整合四點探針座、量測儀器與薄膜量測程式,協助您測量導體及半導體的電阻。

也可選配支援電流電壓IV量測的凱思隆量測軟體, 讓您得知不同電壓下電阻產生的變化。



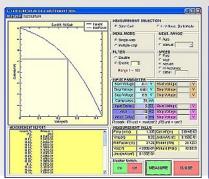
太陽能電池效率量測系統 Solar Cell Efficiency Measurement

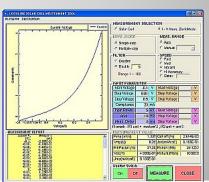


太陽光模擬器適用於單晶矽、多晶矽、非晶薄膜、染料敏化、有機、III-V族半導體等各種不同類型的太陽能電池。

太陽能電池元件電性量測技術,包括:短路電流 Isc、開路電壓Voc、填充因子FF、特徵電阻(包含 串聯及並聯電阻)、效率、理想因子、少數載子復 合壽命、外部量子效率EQE等。

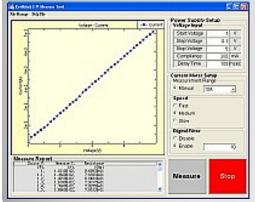
凱思隆結合探針台(Probe Station)、太陽光模擬器,為您量身撰寫程式,提供全方位量測方案。

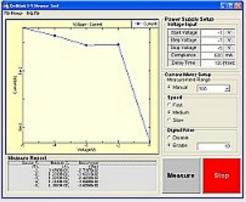












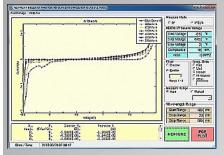
高電流/高電壓IV量測系統 High Current/Voltage IV Measurement (Solar)

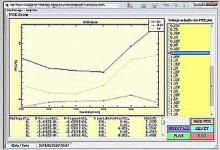
Solar Cell I-V Measurement System:

- Output with 0~100V (@10A)
- Resolution: 2.5mV
- Current Measurement resolution: 10uA (max.10A)
- 2-wire/4-wire resistance measurement
- I-V Test Program
 - Control of Voltage Source and Current Meter
 - Voltage sweep mode for voltagecurrent measurement
 - Voltage, and current can be extracted



綠色能源轉換效率IPCE量測 Green Power IPCE Measurement

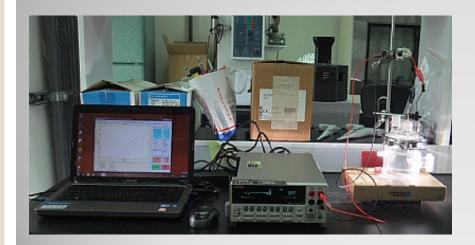




Photon Conversion Efficiency, IPCE, 或稱 External Quantum Efficiency, EQE; or Spectral Responsivity)。凱思隆整合量測儀器與程式,協助您進行太陽能電池入射光子轉換效率量測。

The system measures the dark I-V along

太陽能電池光譜響應度量測設備 (Incident



with the I-V on liquid rector at different incidental wavelength from beam splitter. The beam splitter is well calibrated for the incident at wavelength and power density. Based on the measurement results, the system calculates the efficiency at different wavelength for various applied voltage.

Measure parameters of Solar Cell, such as Voc, Isc, FF, Cell Efficiency, etc.



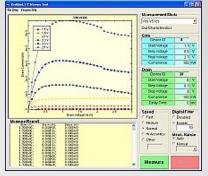


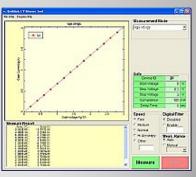
三端元件(MOSFET)電壓電流I-V 量測

MOSFET IV Measurement

檢測半導體或電性元件之電壓電流特性與電壓電容特性曲線,對元件做電性量測分析。

I-V量測(電流電壓量測),利用元件在不同條件下對節點施加電位所得的電流-電壓關係曲線,來評估元件的電性是否在我們所要求的規範內。所需評估的電性包括崩潰電壓、臨限電壓和導通電阻值等。



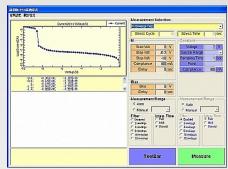


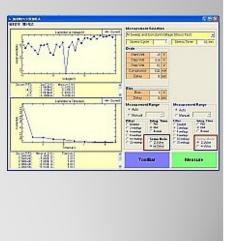




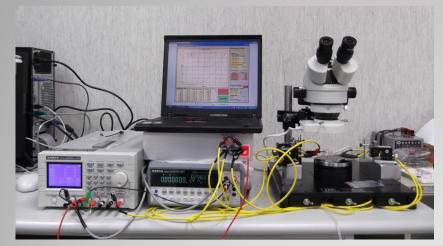
雙端元件(MOS)電壓電流IV量測 MOS I-V Measurement

The system is equipped with manual prober with optional heating facility and one SMU to realize the I-V behavior of MOS, diode, or other related 2-terminal device, for example forward voltage, leakage current, breakdown voltage, the I-V characteristics, and those behaviors after constant/pulse voltage/current stress for a period of time...etc.











低成本電壓電流量測 Low Cost I-V Measurement

藉由電壓源(CC or CV)與電流計,來實現電壓-電流I-V量測應用。

低成本電源電錶(Low Cost Source Meter, SMU),為便宜、可取代Keithley 2400 Source Meter的另一種方案,並可獨立充當電壓源、電流源、電壓計、與電流計。透過軟體整合,可執行電壓-電流I-V量測,支援兩線與四線量測模式。搭配製具(四點探針座),亦可應用於薄膜電阻四點探針量測。

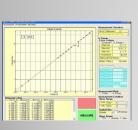
電容電壓量測

CV Measurement

The system is equipped with manual prober with optional heating facility and CV meter to realize the C-V behavior of MOS or other capacitor at different frequency input, for example the C-V characteristics, G-V characteristics, and those behaviors after constant/pulse voltage/current stress for a period of time.









超低電阻量測

Low Resistance Measure.

The system is equipped with manual prober or 4 point prober with optional heating facility and high precision low ohmmeter to realize the super low resistance/sheet resistance/volume resistivity/conductivity measurement. The resistance can be measured down to 10^-7 ohm. The resistance under test at multiple points can be measured through our switching box. The system is applicable to ITO/Glass, ITO/PET, ITO/Si, Si, Conductive Polymer film, Metal alloy film or bulk.

超高電阻量測

High Resistance Measure.

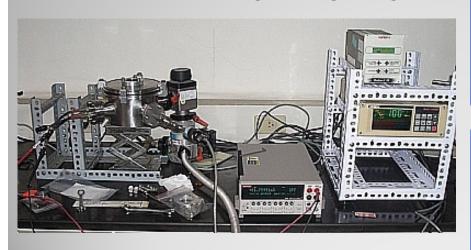
The system is equipped with manual prober with optional heating facility and potential meter with the special connection to realize the super high resistance measurement on nonconductive material.



高壓量測應用與IV軟硬體整合

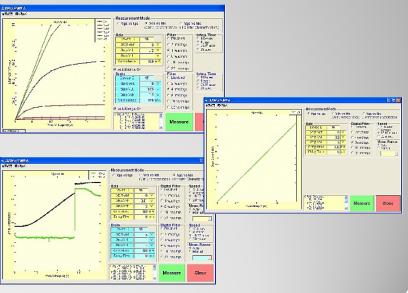
Chamber-High Voltage I-V Measurement

The system is equipped with high voltage applicable chamber with optional heating facility and SMU to realize the I-V behavior of device at high voltage range.



FED高電壓電流量測 (FED三端元件量測)

The system is equipped with manual prober with optional heating facility and two KV ordered power supplies to monitor the I-V-W (Current-Voltage-Power) behaviors at a settable time for the FED when constant or sweep high voltage is applied.

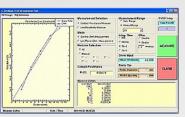




TLM 接觸電阻/多點電阻量測 TLM Contact Resistance Measurement

The system is equipped with manual prober (with probe card for multiple and fine pitch measurements) or 4 point prober (probe head with multiple contact pins) with optional heating facility, switching matrix, and high precision ohmmeter to realize the measurement of Ag/Au paste contact resistance on solar cell.



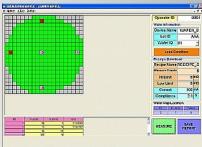


量產用凸塊電阻量測

Production line bump resistance measurement

The system is equipped with manual prober with optional heating facility and SMU to realize the resistance measurement at different location on the wafer. Inputs for device name/ wafer ID/operator ID. Wafer editor for wafer map creation/save/ load. Test recipe creation/save/load. High/low limits with settable deviation %. Pass/Fail judgment. Inline measured data display. Data processing for information, e.g., wafer test summary/lot test summary display. Available Engineer/Operator mode.





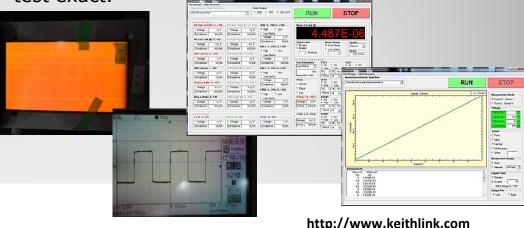


OLED面板AC/DC驅動測試系統 OLED Panel AC/DC Drive Test System



- Equipped with DC powers and AC timing generator for lighting up OLED panel and following optical measurement.
- Voltage is adjustable for DC power pin and AC pin.
- Frequency (timing width/double timing width) for AC pin is adjustable.
- AC mode or DC mode (H or L) selection for AC pin.
- RGB pattern for test is selectable for execution.
- Current consumption measurement for any indicated power pin.
- İ-V measurement can be performed for testkey on OLED panel.

Test job is able to be defined, saved and loaded for test exact.





LIV量測 LIV Measurement

The system is equipped with manual prober with optional heating facility, power meter, spectrometer, oscilloscope, SMU, and high speed current source to realize the L-I-V behavior of laser diode or other related device at CW mode or Pulse mode measurement. Oriented test job for R/G/B pixel selection measurement. Extractable power efficiency, Vth, Ith, and Rth. Max irradiate frequency from the optical spectrum. High speed I-V measurement.

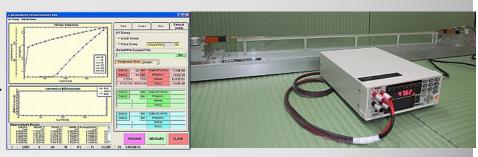
Linear and rotary stages have been integrated in the LIV Functionality Test System. This enables exact positioning of devices for measurements, e.g. with fiber optical spectrometers. It also allows investigations of angular dependencies in emission characteristics of OLFDs.

無氧銅導線電阻率量測

Copper wire resistance measurement

The system is equipped with the test fixture and precision ohmmeter to clamp the copper wire and measure the resistance, volume resistivity and conductivity with 1 meter in length at certain temperature/humidity.

- Control of high precision Ohmmeter for resistance measurement
- Various input condition settings for accurate resistance/temperature measurement
- Conversion of measured values to volume resistivity and conductivity





定電壓(變電壓)下I-t(電流-時間) 量測 I-t Measurement

The system is equipped with manual prober with optional heating facility and SMU to realize the I-t (Current-Time) behavior of device under constant/pulse current/voltage stress. The time to measure is settable.

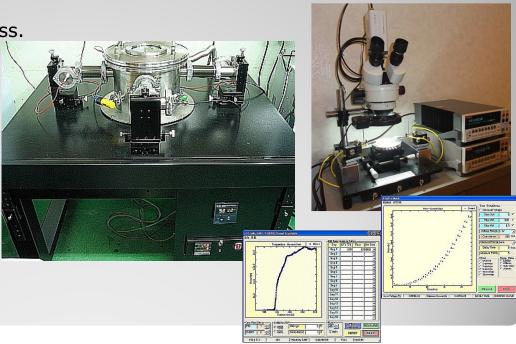
R-T(電阻-溫度)量測 R-T Measurement

The system is equipped with high vacuum manual prober with heating facility and SMU to realize the R-T (Resistance- Temperature) phase transition behavior of device. The temperature can be controlled to heat up to 500 degree C in the chamber.

LED Vf/Vr/II量測 LED Vf/Vr/II Measurement

Forward/Reverse bias current is applied to the LED and voltage is measured. Reverse bias voltage is applied to the LED and current is measured.

Measurements are compared against a specified minimum/maximum limit to determine if the LED passes or fails.





高頻探針

Active Probe/PicoProbe

Active Probes(GGB PicoProbe)可量取高頻及低驅動能力的訊號。利用前置的電路,讓IC的訊號負載落在Active Probes,在針的部分利用高輸入阻抗的Buffer做訊號加強,不會因傳輸線與示波器的負載,造成訊號衰減。





PLED/OLED 功能性測試系統 PLED/OLED Functionality Test System

發光強度-電流-電壓(LIV)量測系統、壽命週期測試系統、及光電測試系統,可方便進行OLED(PLED)、有機太陽能電池、有機感測器等元件的特性分析、壽命週期參數測試、與製程中缺陷分析。

