

MODEL 8500

LOW THERMAL SCANNER

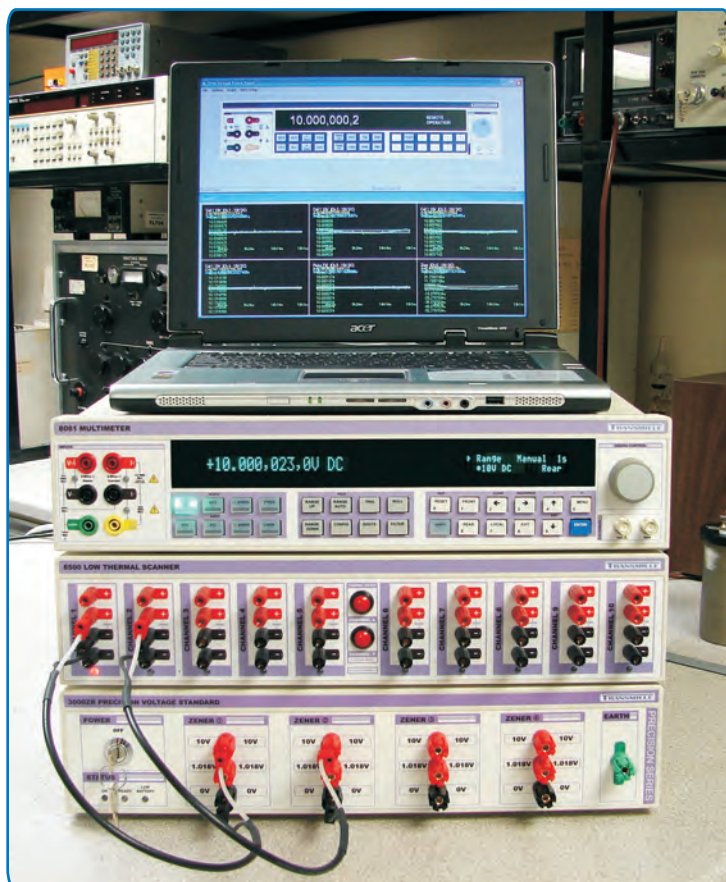


LOW THERMAL 10-CHANNEL SCANNER

MODEL 8500



10 CHANNEL LOW THERMAL SCANNER (OPTION)



Automation of measurements using the model 8500 Low Thermal Scanner allows a complete measurement system to be easily realised. The scanner together with the ProGraph software for PC makes an ideal combination for evaluating stability of measurements.

Each channel provides very low thermal 4 terminal switching making it ideal for 4 wire resistance measurements in resistance thermometry and for resistance comparisons.

The use of ultra low thermal 4mm terminals make connecting the scanner to UUT's easy, allowing the measurement system to be quickly re-configured. With the output from the scanner located on the rear panel connections can be routed efficiently,

Applications include scanning of both electronic and standard reference cells, standard resistance comparisons measurements and PRT probe measurements. Special care has taken in the scanner designed to minimize thermal generated EMF voltages. By reducing internal self heating to almost zero by using a very low power circuit, even the power supply is external, using latching relays which only need a single pulse of power to set and using gold plated de-oxygenated copper terminals thermal voltages have been reduced to less than 150nV.

Control is from the Serial RS232 or USB interface or via the front panel control buttons. LED indicators shows the selected channel. The internal firmware ensures that two channels can never be selected at the same and that the switching is break before make.

SPECIFICATIONS

| | |
|--------------------|--|
| Number of channels | : 10 |
| Switching | : 4 Contact Kelvin switching : 2 Voltage : 2 Current |
| Maximum Voltage | : 200V |
| Maximum Current | : 1A |
| Connection | : Front panel inputs 4mm terminal low thermal gold on copper |
| Thermal EMF | : Typically less than 150nV |
| Switch Resistance | : Less than 0.2 ohms |
| Relay Type | : Latching |
| Interface | : RS232 / USB (via adapter) |

Built-In Measurement Parameters

| | |
|----------------------|--|
| Internal Temperature | : 5°C to 35°C : Accuracy $\pm 0.1^\circ\text{C}$ |
| Humidity | : 10 to 90%RH : Accuracy 5% |
| Mains Voltage | : 200V to 260V AC 50Hz |

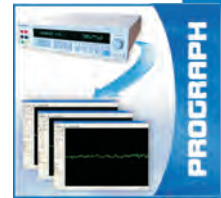
8500 LOW THERMAL SCANNER

PROGRAPH MEASUREMENT ANALYSIS & PROCAL CALIBRATION SOFTWARE



PROGRAPH : MEASUREMENT ANALYSIS SOFTWARE

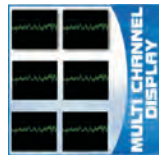
- > BUILT-IN DMM VIRTUAL FRONT PANEL
- > SCANNER CONTROL CONFIGURATION BUILT-IN
- > DATA ANALYSIS / TREND ANALYSIS
- > SIMULTANEOUS GRAPHICAL DISPLAY OF UP TO 10 CHANNELS
- > DATA EXPORT FOR USE WITH MICROSOFT® EXCEL®
- > IDEAL FOR TREND ANALYSIS



PROGRAPH



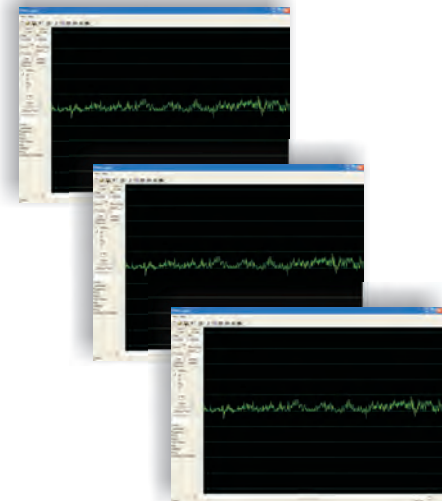
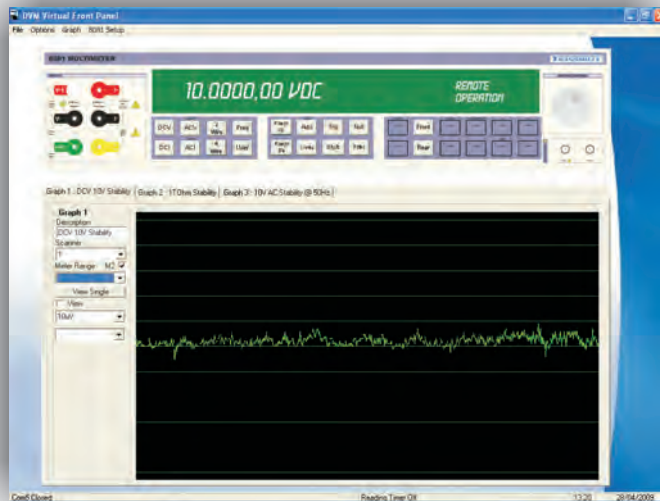
DMM VIRTUAL FRONT PANEL



MULTI CHANNEL DISPLAY



DATA EXPORT



PROGRAPH

PROCAL : MULTI DISCIPLINE CALIBRATION SOFTWARE

- > UNIVERSAL CALIBRATION SOFTWARE
- > FAST PROCEDURE CREATION - PROCEDURE WIZARDS
- > CREATE & PRINT CERTIFICATES ON PLAIN PAPER
- > M3003 / GUM UNCERTAINTIES
- > SUPPORTS CRYSTAL REPORTS
- > CALIBRATION PRICING SUPPORT



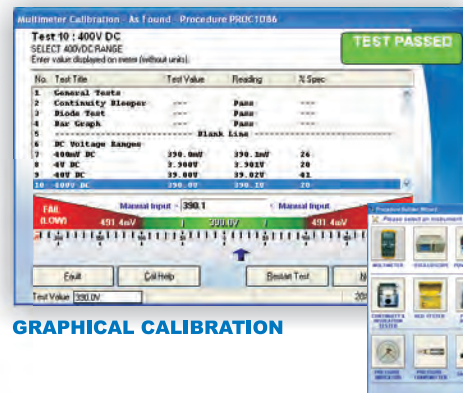
PROCAL



LABEL PRINTING



BARCODE SCANNING



GRAPHICAL CALIBRATION

PROCEDURE WIZARDS

PROCAL PROGRAM SUITE



SYSTEM SETUP



CERTIFICATE PRINTING



PROCEDURE MANAGEMENT



INSTRUMENT CALIBRATION

PROCAL